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(regist\$ same link\$ same (email\$ or "e-mail" or (electronic\$ adj mail\$))) and (internet or web or www or online) and @pd<=19990129	1

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Search History

DATE: Tuesday, October 12, 2004 [Printable Copy](#) [Create Case](#)

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	DB=EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR		
<u>L8</u>	(regist\$ same link\$ same (email\$ or "e-mail" or (electronic\$ adj mail\$))) and (internet or web or www or online) and @pd<=19990129	1	<u>L8</u>
	DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR		
<u>L7</u>	L5 and (server\$ and (consumer\$ or purchaser or buyer) and (merchant\$ or seller))	6	<u>L7</u>
<u>L6</u>	L5 (server\$ and (consumer\$ or purchaser or buyer) and (merchant\$ or seller))	1497	<u>L6</u>
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<u>L3</u>	705/26,27.ccls.	1192	<u>L3</u>
<u>L2</u>	(regist\$ same link\$ same (email\$ or "e-mail" or (electronic\$ adj mail\$))) and (internet or web or www or online) and @ad<=19990129	72	<u>L2</u>

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L8: Entry 1 of 1

File: DWPI

Dec 22, 1998

DERWENT-ACC-NO: 1999-116169

DERWENT-WEEK: 199910

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TITLE: Homepage information registration method for server linked to Internet - involves registering information, registered in temporary registration file, in search database when that information corresponds to received electronic mail

PATENT-ASSIGNEE: NEC SOFTWARE CHUGOKU LTD (NIDE)

PRIORITY-DATA: 1997JP-0150632 (June 9, 1997)

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PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<input type="checkbox"/> JP 10340253 A	December 22, 1998		009	G06F015/00

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP 10340253A	June 9, 1997	1997JP-0150632	

INT-CL (IPC): G06 F 15/00; G06 F 17/30

ABSTRACTED-PUB-NO: JP 10340253A

BASIC-ABSTRACT:

NOVELTY - Several homepage information registration demands are received from users which are linked to Internet. The contents of a temporary registration file (203) are sent to a registrant during the generation of the homepage information registration demand. The temporary registration file is searched when an electronic mail, which confirms the registrant, is received. An information, registered in the temporary registration file, is registered in a search database (205) when that information corresponds to the received electronic mail. DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a homepage information registration apparatus.

USE - For server linked to Internet. DESCRIPTION OF DRAWING(S) - The figure shows the schematic block diagram of a server using a homepage information registration method. (203) temporary registration file; (205) search database. .

ABSTRACTED-PUB-NO: JP 10340253A

EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.2/9

DERWENT-CLASS: T01

EPI-CODES: T01-H07C1; T01-H07C5A; T01-J05B4P; T01-J11C; T01-J20B2;

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L7: Entry 5 of 6

File: USPT

Nov 24, 1998

DOCUMENT-IDENTIFIER: US 5842178 A

TITLE: Computerized quotation system and method

Abstract Text (1):

A computerized system for forming a computer based communications network of network members inclusive of network buyers and or network vendors for processing requests for quotation for goods and services through at least one central processing unit including operating system software for controlling the central processing unit, storage means containing the identification of network members, means for network buyers to generate request for quotation for goods and/or services, means for transmitting said request for quotation to said central processing unit, filter means for selecting appropriate network members to receive said request for quotation based on filter conditions defined by the buyer in said request for quotation and/or by the vendor and/or by the central processing unit, means for broadcasting said request for quotation to the network members selected by said filter means and means for responding to the generator of said request for quotation with either a response to said request for quotation or with a list of said selected network members. Filter conditions may define the class of vendors in terms of geographical location, quantity, language spoken, currency, special conditions of sale, and the like.

Application Filing Date (1):

19980130

Brief Summary Text (2):

This invention relates generally to a computerized system forming a computer based communications network of buyer and vendor members for processing requests for quotation for goods and/or services from network members or their representatives and for linking buyers to sellers through the computer based communications network of network members having means for selectively controlling the linkage between network members in accordance with filter conditions of the buyers and/or sellers as well as filter conditions established by the computerized system. The filter conditions determine which of the network sellers will receive a buyer's request for quotation. More particularly this invention relates to a computerized system forming a computer based communications network between network members having filter means for controlling the communication linkage between such network members based upon chosen filter conditions set up by the network members and the system to satisfy one or more requests for quotation from the network members.

Brief Summary Text (4):

Buyers in need of goods and services often spend considerable time locating an appropriate vendor. Buyers use trade publications, directories, recommendations, and other means to locate vendors. If the type of vendor needed is in a foreign country, the problem compounds. Vendors advertise through various media and by direct sales methods to make known to potential buyers what they sell and how to contact them. Once a buyer identifies a few vendors, each must be contacted to obtain product or service price and availability information. This is a time consuming process and companies typically rely on experienced purchasing staff to accomplish it. In addition, when buyers must sell surplus inventory from time to time they must advertise, cold call, sell to brokers or the like. These processes

are costly and time consuming for most businesses.

Brief Summary Text (5):

The prior art describes computerized shopping systems which employ some kind of central database of goods and services offered to buyers. Information about the goods and services offered is stored centrally and must be kept current centrally. The volume of information required to be maintained and updated in a central database system restricts it to a limited type or number of goods and services or number of vendors it can offer. It is not feasible for such systems to provide access to all standard goods and services and all suppliers world wide. For such a central database to exist, the amount of information to be stored would be awesome as would be the task of keeping it current. It simply is not feasible for central database systems to satisfy the need of buyers to receive timely quotes on an enormous variety of goods and services from vendors anywhere in the world. For this reason existing centralized database systems are created and maintained by the one or a few vendors whose goods and prices are displayed. These systems necessarily restrict a buyer's choice of vendors.

Brief Summary Text (6):

These systems are like electronic supermarkets which are owned by a single company or an association of suppliers. In such systems a vendor provides its database of goods and/or services to a buyer who orders items from the vendor's database. It is analagous to walking into a vendors store and selecting items from the vendors available stock. Another such system is analogous to shopping in a mall. In this case a number of (complementary) vendors combine to offer their collective inventory to the buyer through individual databases or a combined database of available goods or services. In yet another existing system a primary seller, such as an insurance agency, offers to provide buyers premium quotations from the insurance carriers for which the agency is an agent.

Brief Summary Text (7):

In all of the above cases the vendors responding to the buyers request regarding a particular good or service are either the service provider or a vendor with whom the service provider is involved in another business relationship such as advertisers in a common publication or affiliated insurance carriers. These select vendors provide the product and pricing information supplied by the system to buyers. These systems have no capacity to offer an unlimited number of goods and services from any number of vendors who wish to become members of the system. This would require an unrealistically large central database containing information about products, services and vendors. Each vendor would be required to provide detailed information to the central database about its product lines and would be required to update them daily. Accordingly, existing systems are very specialized electronic buying services with a limited selection of goods, services, and vendors. In addition, buyers wishing to sell surplus inventory from time to time cannot use these systems for that purpose.

Brief Summary Text (8):

The present invention is analagous to a cross between telephone and broadcasting technologies. It is this difference which creates the opportunity for buyers to relate to vendors without a rigid structure operating through a centralized computer database as required by existing methods.

Brief Summary Text (10):

The present invention is a computerized system forming a computer based communications network for processing requests for quotation for goods and/or services by broadcasting such requests to network members of the computerized system over any conventional transmitting medium, such as the Internet, to which the computerized system may be connected. No central database of goods, prices, etc. is involved. Instead, buyers formulate requests for quotation and transmit them to the computerized network which broadcasts the request for quotation of one

or more specified standard products to prospective sellers based on filter conditions set by the buyer and/or the seller and/or the network operator. The filter compatible sellers' responses are communicated to the prospective buyer either over the communications network or via other acceptable communications means. Their responses are processed by the quotation system and submitted to the requesting buyer.

Brief Summary Text (11):

The method of the present invention processes requests for quotation for goods and/or services from a buyer or supplier of goods and/or services through a computerized system forming a computer based communications network of network members for linking buyers to suppliers with the computerized system having at least one central processing unit including operating system software for controlling the central processing unit and storage means containing the identification of the network members, wherein the method comprises a computerized system receiving a buyer's request for quotation over a communication network; selecting one or more appropriate vendors to receive the buyer's request for quotation based on filter conditions, if any, set by the buyer, vendor and the network software; transmitting or making available the buyer's request for quotation to said selected vendors over a communications network; and said selected vendors communicating their quotations either directly to the buyer or to the computerized system which in turn makes available or transmits said received quotations to the requesting buyer.

Brief Summary Text (12):

The computerized system of the present invention forms a computer based communications network for processing requests for quotation for goods and/or services through at least one central processing unit with said computerized system comprising operating system software for controlling the central processing unit and storage means containing appropriate identity and other information about members of the network, means for potential buyers of product and/or services to transmit a request for quotation to said central processing unit, means for said central processing unit to selectively broadcast or make available said request for quotation to selected network vendor members, means for said vendor members to respond directly to the requesting buyer or to said central processing unit and means for transmitting or making available from said central processing unit vendor's quotations to the requesting potential buyers.

Drawing Description Text (3):

FIG. 1. shows a network diagram of the computerized system of the present invention where the Internet is the communications network;

Drawing Description Text (4):

FIG. 2. shows a block diagram representing how a buyer interacts with the computerized system of this invention via the Internet;

Drawing Description Text (5):

FIG. 3. is a block diagram of how a vendor's offer of items for special sale is communicated to network buyer members;

Drawing Description Text (6):

FIG. 4. is a data flow diagram linking vendors and buyers to a hypothetical central office arranged to demonstrate an embodiment of the quotation system of this invention;

Drawing Description Text (7):

FIG. 5. and FIG. 6. show logic for processing requests for quotation such that all filter conditions are met and a predetermined number of vendor responses are returned to the requesting buyer;

Drawing Description Text (8):

FIG. 7. shows a hypothetical list of options for use in preparing requests for quotation to be routed over the network. It is one embodiment of data structures suitable for buyers and vendors to interact via the quotation system network of this invention;

Detailed Description Text (2):

The present invention is a computerized quotation system forming a computer based communications network for processing requests for quotation for goods and services from respective buyers or vendors who broadcast such requests to network members of the computerized system. There is no central pricing database to limit the number of buyers and vendors of goods and services or to limit the number of goods and services which can be processed. However the goods and services must be standard items to ensure that there is no confusion as to what buyers are requesting and what sellers are offering to buyers. FIG. 1 shows the system of this invention as configured using the Internet as the communications network.

Detailed Description Text (3):

A network member is anyone or any company which has registered as a user by completing an application and can be a buyer and/or a vendor in using the services provided by the computerized system of the present invention. The programming (e.g. Internet HTML pages or quotation system provided software) which enables network members to interact with the network would include information sufficient for network members to identify standard goods or services that they wish to identify in a request for quotation. Standardization of product or service descriptions is essential to avoid confusion unless a more text oriented specification is appropriate to the product or service type. To this end preprogrammed menu information is provided to classify product and services in categories broken down by functional class and subclass corresponding to the products as they are commercially known and identified. Such menus are readily upgraded to include new and revised commercially available products and services from the manufactures or suppliers of such products and services. Buyers would use this information to prepare requests for quotation which will then be clearly understood by vendors. This product and other information and programming or software could be made available to network members either by direct electronic transfer to the user's personal computer or by providing information, software, or data on computer disks, compact disks, or other appropriate means. Providing standardized information to network users is necessary to correlate product and service identifications for buyers and vendors among other system maintenance functions. FIG. 4 shows how information would flow in an Internet embodiment of this invention. The quotation system central office would maintain its Internet site HTML pages and other necessary items by communication with its Internet World Wide Web server. It would download from the Web site requests for membership as well as requests for quotation. The Central Office would process RFQs through appropriate software and would wait for vendors to contact the Central Office FTP site. Vendors would use quotation system supplied software to cross reference their inventory to link with product lists used by the quotation system. When contacted the Central Office would acquire via suitable vendor software the RFQ information required and available from the vendors product database. If the vendor has prepared information relating to special sales, this information would be transferred to the Central Office at this time. Software version and list upgrades would be performed as well. When the FTP transfers are complet, the Central Office would prepare RFQ e-mail for requesting buyers and forward same as required.

Detailed Description Text (4):

New vendors may apply for membership using the quotation system's World Wide Web application form or by contacting quotation system offices by other means. Buyer members would access the quotation system's World Wide Web site and apply for membership or request price quotations or other available information, such as a trade publication search engine or statistical charts of price versus time by

product, provided through the quotation system's Web site. New members would receive password information via e-mail to ensure that applicants have provided correct e-mail coordinates.

Detailed Description Text (5):

The invention can be understood readily from the following description of the preferred embodiment in conjunction with the flow diagram of FIG. 2 in which communication between buyers, sellers and the network computer(s) is completed using the Internet. A World wide Web home page is set up to provide access to the network by Internet members. A potential user accesses the Internet using any standard Web browser and becomes a quotation network user by completing a registration application providing necessary data about itself. Once registered, a member can access the forms necessary for preparing a request for quotation ("RFQ"), which will be described in greater detail hereafter. The RFQ is subsequently downloaded to a quotation system central office computer through a file transfer protocol (FTP) connection to the Internet Web server.

Detailed Description Text (6):

The RFQ is then processed to select vendors who are capable of quoting on the RFQ and who meet any other conditions set by the requesting buyer (e.g. language, currency, or vendor location). In addition, vendors may "deselect" themselves from quoting on certain types of RFQs by registering their preferences with the quotation system to avoid receiving RFQs of certain types. The buyer and vendor filters may represent in their simplest form defined classes of suppliers and/or buyers and may extend to delineate conditions of sale and/or purchase. Limitations or conditions included in the RFQ and/or in the response are defined for purposes of the present application as filter information or simply "filters". Filtering performed by a quotation system computer may simply involve limiting the network members to whom the RFQ is given and/or to whom responses are given or may be a more complex selection process. Part of the process of selecting vendors involves quotation system business arrangements and other considerations. An example of this would be providing vendors varying categories of service which may require prioritizing the vendors according to a formula. In this way, by the category of service they choose, vendors may determine the percentage of RFQs they receive from a given number received by the quotation system. FIG. 5 and FIG. 6 show sample logic for processing filter conditions to accomplish vendor selection for a given RFQ. FIG. 7 shows hypothetical buyer and vendor information items which could comprise the RFQ data packet.

Detailed Description Text (7):

Once vendors are selected to receive RFQs, the RFQ information may be transmitted to them via FTP over the Internet, however, a preferred way would be to provide vendors with software which permits them to schedule when they wish to communicate with the quotation system. In this case, the vendor software would contact the quotation system over the Internet via FTP; the quotation system would interrogate the vendor's product database (using suitable software which links or cross references the vendor's inventory to the quotation system product and services lists) and retrieve pricing and other information necessary to respond to the RFQ; and thereafter prepare e-mail to be sent to the requesting buyer member. FIG. 8 shows one possible arrangement of RFQ data which would be e-mailed to a buyer. In this example a request for quotation is sent for 5,000 OH006-2000656 type J resistors manufactured by Ohmite for delivery by Aug. 1, 1993. The buyer indicates that the delivery date is firm. Other information such as RFQ date, tracking number and product code are shown. In this case the sender has specified that this request for quotation be routed to vendors in the state of New Jersey USA only. The lower portion of FIG. 6. shows a response from for example Acme Supply, Inc. together with pricing, contact information, delivery and vendor notes indicating that the request can be "Shipped 1000 per box from inventory, subject to prior sale." The e-mail could be configured as HTML pages and read as HTML by the buyer's browser directly or via application helper software provided by the quotation system. One

advantage to providing buyers with HTML type e-mail quotations is that hypertext links can be embedded in the quotation along with data about the quotation which would permit the buyer to select a response option directly from the quotation HTML page. The option may be to request that an e-mail purchase order be sent to a vendor and that the buyer's credit information, e.g. on file with the quotation system, be used to effectuate automatically a credit purchase of the quoted product. Other alternatives include providing quotations to buyers via FTP or through interaction with the quotation system World Wide Web Internet site. As an alternative, communications between buyers and sellers may be by telephone, e-mail or other means.

Detailed Description Text (8):

Shipping companies can be included in the process if a credit purchase conditions the vendor's payment on confirmation from the shipper that the delivery has been received and accepted by the buyer. The quotation system would verify the buyer's credit and notify the vendor of the purchase order and credit code. When the vendor ships the package using a participating shipper and the buyer accepts the goods, the shipper would communicate the delivery acceptance to the quotation system computer or directly to the credit provider to permit release of funds to the vendors account. This would be particularly usefull in international transactions.

Detailed Description Text (9):

Although the above example uses the Internet as the communications network between buyers, sellers and the quotation system computer, other computer communications arrangements can be used as well. Also, although the quotation computer system may execute all functions using one node on a communications network, it is equally suitable to have multiple nodes at many sites to service all network users. FIG. 1 shows two such quotation system central computers. In this event, all nodes would intercommunicate as required to complete routing of user information and other functions.

Detailed Description Text (10):

The quotation system computer is schmatically shown in FIG. 4 as the "Central Office" and includes a random access memory for temporary storage of information, a read only memory for permanant storage of the computers configuration and basic operating commands, an input/output adapter for connecting peripheral devices and known input and interface devices. Visual output is provided by display adapters and display devices. The network computer is controlled by one or more central processing units which may include a conventional microprocessor and a number of other units interconnected via a system bus. Any operating system may be resident on the computer. Programming for the buyer's and vendor's computer type equipment would be appropriate to the variety of goods and services buyers and vendors wish to sell over the network and would change as new goods and services come into existence and old ones are discontinued.

Detailed Description Text (11):

FIG. 3 shows in block diagram a process by which vendors may offer items "on sale" to quotation system buyers. In this case, buyers will be informed of the sale if they identify or have identified the product or its category to the quotation system and provided the vendor has defined filter conditions which include the buyer in the class of buyers to which the vendor wishes to communicate its "on sale" offer.

Detailed Description Text (13):

The process of the present invention begins when a buyer prepares a network compatible request for quotation (RFQ). The buyer additionally may prepare or has previously prepared a definition of the class of vendor to receive the request. The request or requests are telecommunicated to a quotation network computer and is thereafter routed to the specified class of vendors consistent with network software and vendor requirements or conditions, if any. Vendors in the defined

class respond to the buyer's request for quotation and the buyer may purchase from a responding vendor. The number of vendors within the specified class will depend on the buyer's class specification. For example, a buyer who specifies vendors of volt meters in New York State will reach more vendors than if New York City alone were specified. Such class specifications are information filters through which only the desired vendors can pass. By joining the network, all vendors are potential class members no matter where in the world they are located. In addition, a vendor may choose to filter out requests for quotation for other than a vendor defined class of requests for quotation, e.g., requests must be for at least 10,000 pieces or for goods produced by a specific manufacturer. The computerized system may also add a filter, for example, to reflect the type of service selected by the buyer and/or vendor. The network computer's filter may time sequence routing of the buyer's request based on the vendor's distance from the buyer's location. This would give vendors with the lowest shipping charges earlier access to the buyer's request and would give the buyer an opportunity to cancel further routings of its request if responses indicate that more distant vendors are not likely to provide more competitive quotes than those already received.

Detailed Description Text (14):

When a vendor wants to receive requests for quotation over the network, the vendor notifies the network of the class of goods or services in which the vendor deals (a "request for quotation class definition"). This can be communicated by voice, telephone, fax, et cetera, or by use of programming provided for that purpose but the preferred method is to use programming provided for that purpose by the network. The request for quotation class definition is transmitted to the network and the network uses that definition to filter all requests for quotation routed to the vendor, i.e., to the class defined by a buyer of which the vendor is a member. In this way the vendor receives only those requests for quotation which conform to the vendor's request for quotation definition. The number of vendors within a class to receive a request for quotation may be very large. To keep the process manageable network software may be arranged to limit the number of vendors to receive a request for quotation.

Detailed Description Text (15):

By using the present invention, a network member buyer in Frankfurt, Germany who requests a quotation for an electronic part may receive quotations within minutes from previously unknown network member vendors in Cupertino, Calif. and Kyoto, Japan.

Detailed Description Text (16):

Where appropriate, programming would enable the user to receive, review, and reply to responses from network users. Programming would be tailored to the various types of request for response network users require. Users can be buyers and/or vendors. When a user wants to buy something, the programming for preparing a request for quotation is invoked on the user's computer or computer like device. When a user wants to sell something, a request for quotation class definition is prepared using programming provided for that purpose. A typical situation in which a user who is predominantly a buyer may choose to be a vendor is when the user overstocks an item and chooses to resell the surplus inventory via the network. To sell surplus inventory without the network of this invention requires advertising, word of mouth, cold calling, sale to a broker or the like. In addition, the network software could be arranged to enable vendors to donate unwanted equipment, et cetera, to charity network members. In addition, the network filters could be defined to permit intra organizational notices of availability or requirements for products or services, especially in large distributed corporations or governmental agencies.

Detailed Description Text (17):

The network is a routing service with the routing being controlled by class description filters which can be specified by the buyer, the network computer, and

the vendors. By analogy, it is like a cross between a telephone call and a radio broadcast where the ultimate recipient is neither an individual nor a mass audience, but a class of recipients identified by their characteristics. In the preferred embodiment the vendor class of network members are filtered to be selected based on their likelihood to respond to the request for quotation. Alternatively, or in addition, the vendor responses may likewise be filtered to satisfy conditions of the vendors responding or in accordance with predefined conditions for facilitating a linkage between the prospective buyer and an acceptable seller.

Current US Original Classification (1):
705/26

CLAIMS:

1. A system for engaging in commercial transactions, comprising;

filter means for accepting filter conditions from buyers and sellers;

a plurality of buyers for communicating RFQs to said filter means;

a plurality of sellers for communicating quotes to said filter means in response to said RFQs, said filter means including means for determining, based upon said filter conditions, which sellers should receive RFQs from a buyer, and which quotes should be received by the buyer.

2. A method of utilizing a data network for advertising and selling items for sale by a seller including the steps of:

communicating, to the centralized filter means, from said seller, sale information indicating items offered for sale and at least one class of buyers to receive sale information;

communicating, to the centralized filter means, from a potential buyer, a category of item in which said buyer is interested;

using said filter means to match buyer and seller supplied information;

communicating an offer for sale from said seller for at least one item in said category of items indicated, to a buyer if said buyer is within said class and said items are within said category.

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L7: Entry 5 of 6

File: USPT

Nov 24, 1998

DOCUMENT-IDENTIFIER: US 5842178 A

TITLE: Computerized quotation system and method

Abstract Text (1):

A computerized system for forming a computer based communications network of network members inclusive of network buyers and or network vendors for processing requests for quotation for goods and services through at least one central processing unit including operating system software for controlling the central processing unit, storage means containing the identification of network members, means for network buyers to generate request for quotation for goods and/or services, means for transmitting said request for quotation to said central processing unit, filter means for selecting appropriate network members to receive said request for quotation based on filter conditions defined by the buyer in said request for quotation and/or by the vendor and/or by the central processing unit, means for broadcasting said request for quotation to the network members selected by said filter means and means for responding to the generator of said request for quotation with either a response to said request for quotation or with a list of said selected network members. Filter conditions may define the class of vendors in terms of geographical location, quantity, language spoken, currency, special conditions of sale, and the like.

Application Filing Date (1):

19980130

Brief Summary Text (2):

This invention relates generally to a computerized system forming a computer based communications network of buyer and vendor members for processing requests for quotation for goods and/or services from network members or their representatives and for linking buyers to sellers through the computer based communications network of network members having means for selectively controlling the linkage between network members in accordance with filter conditions of the buyers and/or sellers as well as filter conditions established by the computerized system. The filter conditions determine which of the network sellers will receive a buyer's request for quotation. More particularly this invention relates to a computerized system forming a computer based communications network between network members having filter means for controlling the communication linkage between such network members based upon chosen filter conditions set up by the network members and the system to satisfy one or more requests for quotation from the network members.

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Buyers in need of goods and services often spend considerable time locating an appropriate vendor. Buyers use trade publications, directories, recommendations, and other means to locate vendors. If the type of vendor needed is in a foreign country, the problem compounds. Vendors advertise through various media and by direct sales methods to make known to potential buyers what they sell and how to contact them. Once a buyer identifies a few vendors, each must be contacted to obtain product or service price and availability information. This is a time consuming process and companies typically rely on experienced purchasing staff to accomplish it. In addition, when buyers must sell surplus inventory from time to time they must advertise, cold call, sell to brokers or the like. These processes

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The prior art describes computerized shopping systems which employ some kind of central database of goods and services offered to buyers. Information about the goods and services offered is stored centrally and must be kept current centrally. The volume of information required to be maintained and updated in a central database system restricts it to a limited type or number of goods and services or number of vendors it can offer. It is not feasible for such systems to provide access to all standard goods and services and all suppliers world wide. For such a central database to exist, the amount of information to be stored would be awesome as would be the task of keeping it current. It simply is not feasible for central database systems to satisfy the need of buyers to receive timely quotes on an enormous variety of goods and services from vendors anywhere in the world. For this reason existing centralized database systems are created and maintained by the one or a few vendors whose goods and prices are displayed. These systems necessarily restrict a buyer's choice of vendors.

Brief Summary Text (6):

These systems are like electronic supermarkets which are owned by a single company or an association of suppliers. In such systems a vendor provides its database of goods and/or services to a buyer who orders items from the vendor's database. It is analagous to walking into a vendors store and selecting items from the vendors available stock. Another such system is analogous to shopping in a mall. In this case a number of (complementary) vendors combine to offer their collective inventory to the buyer through individual databases or a combined database of available goods or services. In yet another existing system a primary seller, such as an insurance agency, offers to provide buyers premium quotations from the insurance carriers for which the agency is an agent.

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In all of the above cases the vendors responding to the buyers request regarding a particular good or service are either the service provider or a vendor with whom the service provider is involved in another business relationship such as advertisers in a common publication or affiliated insurance carriers. These select vendors provide the product and pricing information supplied by the system to buyers. These systems have no capacity to offer an unlimited number of goods and services from any number of vendors who wish to become members of the system. This would require an unrealistically large central database containing information about products, services and vendors. Each vendor would be required to provide detailed information to the central database about its product lines and would be required to update them daily. Accordingly, existing systems are very specialized electronic buying services with a limited selection of goods, services, and vendors. In addition, buyers wishing to sell surplus inventory from time to time cannot use these systems for that purpose.

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or more specified standard products to prospective sellers based on filter conditions set by the buyer and/or the seller and/or the network operator. The filter compatible sellers' responses are communicated to the prospective buyer either over the communications network or via other acceptable communications means. Their responses are processed by the quotation system and submitted to the requesting buyer.

Brief Summary Text (11):

The method of the present invention processes requests for quotation for goods and/or services from a buyer or supplier of goods and/or services through a computerized system forming a computer based communications network of network members for linking buyers to suppliers with the computerized system having at least one central processing unit including operating system software for controlling the central processing unit and storage means containing the identification of the network members, wherein the method comprises a computerized system receiving a buyer's request for quotation over a communication network; selecting one or more appropriate vendors to receive the buyer's request for quotation based on filter conditions, if any, set by the buyer, vendor and the network software; transmitting or making available the buyer's request for quotation to said selected vendors over a communications network; and said selected vendors communicating their quotations either directly to the buyer or to the computerized system which in turn makes available or transmits said received quotations to the requesting buyer.

Brief Summary Text (12):

The computerized system of the present invention forms a computer based communications network for processing requests for quotation for goods and/or services through at least one central processing unit with said computerized system comprising operating system software for controlling the central processing unit and storage means containing appropriate identity and other information about members of the network, means for potential buyers of product and/or services to transmit a request for quotation to said central processing unit, means for said central processing unit to selectively broadcast or make available said request for quotation to selected network vendor members, means for said vendor members to respond directly to the requesting buyer or to said central processing unit and means for transmitting or making available from said central processing unit vendor's quotations to the requesting potential buyers.

Drawing Description Text (3):

FIG. 1. shows a network diagram of the computerized system of the present invention where the Internet is the communications network;

Drawing Description Text (4):

FIG. 2. shows a block diagram representing how a buyer interacts with the computerized system of this invention via the Internet;

Drawing Description Text (5):

FIG. 3. is a block diagram of how a vendor's offer of items for special sale is communicated to network buyer members;

Drawing Description Text (6):

FIG. 4. is a data flow diagram linking vendors and buyers to a hypothetical central office arranged to demonstrate an embodiment of the quotation system of this invention;

Drawing Description Text (7):

FIG. 5. and FIG. 6. show logic for processing requests for quotation such that all filter conditions are met and a predetermined number of vendor responses are returned to the requesting buyer;

Drawing Description Text (8):

FIG. 7. shows a hypothetical list of options for use in preparing requests for quotation to be routed over the network. It is one embodiment of data structures suitable for buyers and vendors to interact via the quotation system network of this invention;

Detailed Description Text (2):

The present invention is a computerized quotation system forming a computer based communications network for processing requests for quotation for goods and services from respective buyers or vendors who broadcast such requests to network members of the computerized system. There is no central pricing database to limit the number of buyers and vendors of goods and services or to limit the number of goods and services which can be processed. However the goods and services must be standard items to ensure that there is no confusion as to what buyers are requesting and what sellers are offering to buyers. FIG. 1 shows the system of this invention as configured using the Internet as the communications network.

Detailed Description Text (3):

A network member is anyone or any company which has registered as a user by completing an application and can be a buyer and/or a vendor in using the services provided by the computerized system of the present invention. The programming (e.g. Internet HTML pages or quotation system provided software) which enables network members to interact with the network would include information sufficient for network members to identify standard goods or services that they wish to identify in a request for quotation. Standardization of product or service descriptions is essential to avoid confusion unless a more text oriented specification is appropriate to the product or service type. To this end preprogrammed menu information is provided to classify product and services in categories broken down by functional class and subclass corresponding to the products as they are commercially known and identified. Such menus are readily upgraded to include new and revised commercially available products and services from the manufactures or suppliers of such products and services. Buyers would use this information to prepare requests for quotation which will then be clearly understood by vendors. This product and other information and programming or software could be made available to network members either by direct electronic transfer to the user's personal computer or by providing information, software, or data on computer disks, compact disks, or other appropriate means. Providing standardized information to network users is necessary to correlate product and service identifications for buyers and vendors among other system maintenance functions. FIG. 4 shows how information would flow in an Internet embodiment of this invention. The quotation system central office would maintain its Internet site HTML pages and other necessary items by communication with its HTML World Wide Web server. It would download from the Web site requests for membership as well as requests for quotation. The Central Office would process RFQs through appropriate software and would wait for vendors to contact the Central Office FTP site. Vendors would use quotation system supplied software to cross reference their inventory to link with product lists used by the quotation system. When contacted the Central Office would acquire via suitable vendor software the RFQ information required and available from the vendors product database. If the vendor has prepared information relating to special sales, this information would be transferred to the Central Office at this time. Software version and list upgrades would be performed as well. When the FTP transfers are complete, the Central Office would prepare RFQ e-mail for requesting buyers and forward same as required.

Detailed Description Text (4):

New vendors may apply for membership using the quotation system's World Wide Web application form or by contacting quotation system offices by other means. Buyer members would access the quotation system's World Wide Web site and apply for membership or request price quotations or other available information, such as a trade publication search engine or statistical charts of price versus time by

product, provided through the quotation system's Web site. New members would receive password information via e-mail to ensure that applicants have provided correct e-mail coordinates.

Detailed Description Text (5):

The invention can be understood readily from the following description of the preferred embodiment in conjunction with the flow diagram of FIG. 2 in which communication between buyers, sellers and the network computer(s) is completed using the Internet. A World wide Web home page is set up to provide access to the network by Internet members. A potential user accesses the Internet using any standard Web browser and becomes a quotation network user by completing a registration application providing necessary data about itself. Once registered, a member can access the forms necessary for preparing a request for quotation ("RFQ"), which will be described in greater detail hereafter. The RFQ is subsequently downloaded to a quotation system central office computer through a file transfer protocol (FTP) connection to the Internet Web server.

Detailed Description Text (6):

The RFQ is then processed to select vendors who are capable of quoting on the RFQ and who meet any other conditions set by the requesting buyer (e.g. language, currency, or vendor location). In addition, vendors may "deselect" themselves from quoting on certain types of RFQs by registering their preferences with the quotation system to avoid receiving RFQs of certain types. The buyer and vendor filters may represent in their simplest form defined classes of suppliers and/or buyers and may extend to delineate conditions of sale and/or purchase. Limitations or conditions included in the RFQ and/or in the response are defined for purposes of the present application as filter information or simply "filters". Filtering performed by a quotation system computer may simply involve limiting the network members to whom the RFQ is given and/or to whom responses are given or may be a more complex selection process. Part of the process of selecting vendors involves quotation system business arrangements and other considerations. An example of this would be providing vendors varying categories of service which may require prioritizing the vendors according to a formula. In this way, by the category of service they choose, vendors may determine the percentage of RFQs they receive from a given number received by the quotation system. FIG. 5 and FIG. 6 show sample logic for processing filter conditions to accomplish vendor selection for a given RFQ. FIG. 7 shows hypothetical buyer and vendor information items which could comprise the RFQ data packet.

Detailed Description Text (7):

Once vendors are selected to receive RFQs, the RFQ information may be transmitted to them via FTP over the Internet, however, a preferred way would be to provide vendors with software which permits them to schedule when they wish to communicate with the quotation system. In this case, the vendor software would contact the quotation system over the Internet via FTP; the quotation system would interrogate the vendor's product database (using suitable software which links or cross references the vendor's inventory to the quotation system product and services lists) and retrieve pricing and other information necessary to respond to the RFQ; and thereafter prepare e-mail to be sent to the requesting buyer member. FIG. 8 shows one possible arrangement of RFQ data which would be e-mailed to a buyer. In this example a request for quotation is sent for 5,000 OH006-2000656 type J resistors manufactured by Ohmite for delivery by Aug. 1, 1993. The buyer indicates that the delivery date is firm. Other information such as RFQ date, tracking number and product code are shown. In this case the sender has specified that this request for quotation be routed to vendors in the state of New Jersey USA only. The lower portion of FIG. 6. shows a response from for example Acme Supply, Inc. together with pricing, contact information, delivery and vendor notes indicating that the request can be "Shipped 1000 per box from inventory, subject to prior sale." The e-mail could be configured as HTML pages and read as HTML by the buyer's browser directly or via application helper software provided by the quotation system. One

advantage to providing buyers with HTML type e-mail quotations is that hypertext links can be embedded in the quotation along with data about the quotation which would permit the buyer to select a response option directly from the quotation HTML page. The option may be to request that an e-mail purchase order be sent to a vendor and that the buyer's credit information, e.g. on file with the quotation system, be used to effectuate automatically a credit purchase of the quoted product. Other alternatives include providing quotations to buyers via FTP or through interaction with the quotation system World Wide Web Internet site. As an alternative, communications between buyers and sellers may be by telephone, e-mail or other means.

Detailed Description Text (8):

Shipping companies can be included in the process if a credit purchase conditions the vendor's payment on confirmation from the shipper that the delivery has been received and accepted by the buyer. The quotation system would verify the buyer's credit and notify the vendor of the purchase order and credit code. When the vendor ships the package using a participating shipper and the buyer accepts the goods, the shipper would communicate the delivery acceptance to the quotation system computer or directly to the credit provider to permit release of funds to the vendors account. This would be particularly usefull in international transactions.

Detailed Description Text (9):

Although the above example uses the Internet as the communications network between buyers, sellers and the quotation system computer, other computer communications arrangements can be used as well. Also, although the quotation computer system may execute all functions using one node on a communications network, it is equally suitable to have multiple nodes at many sites to service all network users. FIG. 1 shows two such quotation system central computers. In this event, all nodes would intercommunicate as required to complete routing of user information and other functions.

Detailed Description Text (10):

The quotation system computer is schmatically shown in FIG. 4 as the "Central Office" and includes a random access memory for temporary storage of information, a read only memory for permanant storage of the computers configuration and basic operating commands, an input/output adapter for connecting peripheral devices and known input and interface devices. Visual output is provided by display adapters and display devices. The network computer is controlled by one or more central processing units which may include a conventional microprocessor and a number of other units interconnected via a system bus. Any operating system may be resident on the computer. Programming for the buyer's and vendor's computer type equipment would be appropriate to the variety of goods and services buyers and vendors wish to sell over the network and would change as new goods and services come into existence and old ones are discontinued.

Detailed Description Text (11):

FIG. 3 shows in block diagram a process by which vendors may offer items "on sale" to quotation system buyers. In this case, buyers will be informed of the sale if they identify or have identified the product or its category to the quotation system and provided the vendor has defined filter conditions which include the buyer in the class of buyers to which the vendor wishes to communicate its "on sale" offer.

Detailed Description Text (13):

The process of the present invention begins when a buyer prepares a network compatible request for quotation (RFQ). The buyer additionally may prepare or has previously prepared a definition of the class of vendor to receive the request. The request or requests are telecommunicated to a quotation network computer and is thereafter routed to the specified class of vendors consistent with network software and vendor requirements or conditions, if any. Vendors in the defined

class respond to the buyer's request for quotation and the buyer may purchase from a responding vendor. The number of vendors within the specified class will depend on the buyer's class specification. For example, a buyer who specifies vendors of volt meters in New York State will reach more vendors than if New York City alone were specified. Such class specifications are information filters through which only the desired vendors can pass. By joining the network, all vendors are potential class members no matter where in the world they are located. In addition, a vendor may choose to filter out requests for quotation for other than a vendor defined class of requests for quotation, e.g., requests must be for at least 10,000 pieces or for goods produced by a specific manufacturer. The computerized system may also add a filter, for example, to reflect the type of service selected by the buyer and/or vendor. The network computer's filter may time sequence routing of the buyer's request based on the vendor's distance from the buyer's location. This would give vendors with the lowest shipping charges earlier access to the buyer's request and would give the buyer an opportunity to cancel further routings of its request if responses indicate that more distant vendors are not likely to provide more competitive quotes than those already received.

Detailed Description Text (14):

When a vendor wants to receive requests for quotation over the network, the vendor notifies the network of the class of goods or services in which the vendor deals (a "request for quotation class definition"). This can be communicated by voice, telephone, fax, et cetera, or by use of programming provided for that purpose but the preferred method is to use programming provided for that purpose by the network. The request for quotation class definition is transmitted to the network and the network uses that definition to filter all requests for quotation routed to the vendor, i.e., to the class defined by a buyer of which the vendor is a member. In this way the vendor receives only those requests for quotation which conform to the vendor's request for quotation definition. The number of vendors within a class to receive a request for quotation may be very large. To keep the process manageable network software may be arranged to limit the number of vendors to receive a request for quotation.

Detailed Description Text (15):

By using the present invention, a network member buyer in Frankfurt, Germany who requests a quotation for an electronic part may receive quotations within minutes from previously unknown network member vendors in Cupertino, Calif. and Kyoto, Japan.

Detailed Description Text (16):

Where appropriate, programming would enable the user to receive, review, and reply to responses from network users. Programming would be tailored to the various types of request for response network users require. Users can be buyers and/or vendors. When a user wants to buy something, the programming for preparing a request for quotation is invoked on the user's computer or computer like device. When a user wants to sell something, a request for quotation class definition is prepared using programming provided for that purpose. A typical situation in which a user who is predominantly a buyer may choose to be a vendor is when the user overstocks an item and chooses to resell the surplus inventory via the network. To sell surplus inventory without the network of this invention requires advertising, word of mouth, cold calling, sale to a broker or the like. In addition, the network software could be arranged to enable vendors to donate unwanted equipment, et cetera, to charity network members. In addition, the network filters could be defined to permit intra organizational notices of availability or requirements for products or services, especially in large distributed corporations or governmental agencies.

Detailed Description Text (17):

The network is a routing service with the routing being controlled by class description filters which can be specified by the buyer, the network computer, and

the vendors. By analogy, it is like a cross between a telephone call and a radio broadcast where the ultimate recipient is neither an individual nor a mass audience, but a class of recipients identified by their characteristics. In the preferred embodiment the vendor class of network members are filtered to be selected based on their likelihood to respond to the request for quotation. Alternatively, or in addition, the vendor responses may likewise be filtered to satisfy conditions of the vendors responding or in accordance with predefined conditions for facilitating a linkage between the prospective buyer and an acceptable seller.

Current US Original Classification (1):
705/26

CLAIMS:

1. A system for engaging in commercial transactions, comprising;

filter means for accepting filter conditions from buyers and sellers;

a plurality of buyers for communicating RFQs to said filter means;

a plurality of sellers for communicating quotes to said filter means in response to said RFQs, said filter means including means for determining, based upon said filter conditions, which sellers should receive RFQs from a buyer, and which quotes should be received by the buyer.

2. A method of utilizing a data network for advertising and selling items for sale by a seller including the steps of:

communicating, to the centralized filter means, from said seller, sale information indicating items offered for sale and at least one class of buyers to receive sale information;

communicating, to the centralized filter means, from a potential buyer, a category of item in which said buyer is interested;

using said filter means to match buyer and seller supplied information;

communicating an offer for sale from said seller for at least one item in said category of items indicated, to a buyer if said buyer is within said class and said items are within said category.

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L7: Entry 4 of 6

File: USPT

Jun 29, 1999

DOCUMENT-IDENTIFIER: US 5918214 A

TITLE: System and method for finding product and service related information on the internetAbstract Text (1):

A novel system and method for finding product and service related information on the Internet. The system includes Internet Servers which store information pertaining to Universal Product or Service Number (e.g. UPC number) preassigned to each product and service registered in the system, with Uniform Resource Locators (URLs) that point to the location of one or more information resources on the Internet, e.g. World Wide Websites, related to such products or services. Each client computer system includes an Internet browser or Internet application tool which is provided with a "Internet Product/Service Information (IPSI) Finder" button and a "Universal Product/Service Number (UPSN) Search" button. The system enters its "IPSI Finder Mode" when the "IPSI Finder" button is depressed and enters the "UPSN Search Mode" when the "UPSN Search" button is depressed. When the system is in its IPSI Finder Mode, a predesignated information resource (e.g. advertisement, product information, etc.) pertaining to any commercial product or service registered with the system is automatically accessed from the Internet and displayed from the Internet browser by simply entering the registered product's UPN or the registered service's USN into the Internet browser. When the system is in its "UPSN Search Mode", a predesignated information resource pertaining to any commercial product or service registered with the system is automatically accessed from the Internet and displayed from the Internet browser by simply entering the registered product's trademark(s) or (servicemark) and/or associated company name into the Internet browser.

Application Filing Date (1):

19961025

Brief Summary Text (3):

The present invention relates to a system and method for finding product and service related information on the National Information Infrastructure (e.g. the Internet).

Brief Summary Text (6):

In recent times, there has been a number of significant developments in connection with the global information network called the "Internet", which has greatly influenced many companies to create multi-media Internet Websites in order to advertise, sell and maintain their products and services. Examples of such developments include, for example: the Hypertext Markup Language (HTML) by Tim Berners-Lee; easy to use GUI-based Internet navigation tools, such as the Netscape.RTM. browser from Netscape Communications, Inc., the Internet Explorer.TM. browser from MicroSoft Corporation and the Mosaic.TM. browser from Spyglass Corporation; and the Virtual Reality Modelling Language (VRML) by Mark Pecse. Such developments in recent times have made it very easy for businesses to create 2-D Hypermedia-based Home Pages and 3-D VR Worlds (i.e. 3-D Websites) for the purpose of projecting a desired "corporate image" and providing a backdrop for financial investment solicitation as well as product and service advertisement, sales and maintenance operations.

Brief Summary Text (7):

Presently, a person desiring to acquire information about any particular product sold anywhere in the world, has had a number of search options available to them. In particular, he or she may attempt to directly contact the manufacturer, wholesaler or reseller by telephone, US mail, e-mail, or through the company's World Wide Website (WWW), if they have one. In the event one decides to acquire product information through the seller's WWW site, he or she must first determine the location of its WWW site (i.e. Internet address) which oftentimes can involve using Internet Search engines such as Yahoo, AltaVista, WebCrawler, or the like. This can be a very time consuming process and sometimes lead to a dead end. Once the Internet address is obtained, one must then review the home page of the company in order to find where information on a particular product resides on the Internet. This search process can be both time consuming and expensive (in terms of Internet time) and may not turn up information on the product or service of interest.

Brief Summary Text (8):

In some instances, product brochures bear a preprinted Internet address designed to direct or point prospective customers to a particular Web site where more detailed product information can be found. A recent example of this "preprinted Web Address" pointing technique is the 1996 product brochure published by the Sony Corporation for its Sony.RTM. PCV-70 Personal Computer, which refers prospective customers to the Sony Web Address "<http://www.sony.com/pc>". While this approach provides a direct way of finding product and service related information on the Internet, it is not without its shortcomings and drawbacks.

Brief Summary Text (9):

In particular, when a company improves, changes or modifies an existing Website which publishes product and/or service advertisements and related information, it is difficult (if not impossible) not to change the Internet locations (i.e. Web addresses) at which such product and/or service advertisements and related information appear. Whenever a company decides or is forced to change any of its advertising, marketing and/or public relations firms, there is a substantial likelihood that new Websites will be created and launched for particular products and services, and that the Web addresses of such new Websites will no longer correspond with the Web addresses on preprinted product and service brochures currently in circulation at the time. This can result in pointing a consumer to erroneous or vacant Web sites, that present either old or otherwise outdated product and/or service information, possibly adversely influencing the consumer's purchasing decision.

Brief Summary Text (10):

Moreover, when a company launches a new Website as part of a new advertising and marketing campaign for a particular product or service, any preprinted advertising or marketing material relating to such products and services will not reflect the new Website addresses which the campaign is attempting to get consumers to visit. This fact about preprinted advertising media renders it difficult to unify new and old advertising media currently in circulation into an advertising and marketing campaign having a coherent theme.

Brief Summary Text (11):

In short, the inherently static nature of the "preprinted Web address" pointing technique described above is wholly incapable of adjusting to the dynamic needs of advertising, marketing and public relations alike.

Brief Summary Text (12):

Thus, it is clear that there is great need in the art for an improved system and method for finding commercial product and service information on the Internet, in a way which avoids the shortcomings and drawbacks of prior art systems and methodologies.

Brief Summary Text (14):

Accordingly, a primary object of the present invention is to provide a novel system and method for finding product and service related information on the Internet, while avoiding the shortcomings and drawbacks of prior art systems and methodologies.

Brief Summary Text (15):

Another object of the present invention is to provide such a system and method, wherein virtually any type of product or service can be registered with the system by symbolically linking its preassigned Universal Product or Service Number (e.g. UPC numeric string) that points to the Uniform Resource Locators (URLs) of one or more information resources on the Internet, e.g. World Wide Websites, related to such products or services.

Brief Summary Text (16):

Another object of the present invention is to provide such a system and method with an improved Internet browser or Internet application tool having both an "Internet Product/Service Information (IPSI) Finder" button for entering the "IPSI Finder Mode of the system when it is depressed, and also a "Universal Product/Service Number (UPSN) Search" button for entering the "UPSN Search Mode" when the "UPSN Search" button is depressed.

Brief Summary Text (17):

Another object of the present invention is to provide such a system, wherein, when the system is in its product/service finder mode, a predesignated information resource (e.g. advertisement, product information, etc.) pertaining to any commercial product or service registered with the system can be automatically accessed from the Internet and displayed from the Internet browser by simply entering the registered product's UPN or the registered service's USN into the Internet browser.

Brief Summary Text (18):

Another object of the present invention is to provide such a system, wherein, when the system is in its "UPSN Search Mode", a predesignated information resource (e.g. advertisement, produce information, etc.) pertaining to any commercial product or service registered with the system can be automatically accessed from the Internet and displayed from the Internet browser by simply entering the registered product's trademark(s) or associated company name into the Internet browser.

Brief Summary Text (19):

Another object of the present invention is to provide such a system, wherein a predesignated information resource pertaining to any commercial product or service having been assigned a Universal Product Number (UPN) or Universal Service Number (USN) can be accessed from the Internet and displayed from the Internet browser by simply pressing its IPSI Finder button and then entering the UPN or USN numeric string into a dialogue box which pops up on Internet Browser.

Brief Summary Text (20):

Another object of the present invention is to provide such a system in which a relational database, referred to as "an Internet Product and Service Directory (IPSD)" is realized on one or more data-synchronized IPSD Servers for the purpose of registering product and service related information, namely: (i) information representative of commercial product descriptions, the trademarks used in connection therewith, the company names providing and/or promoting such products, the E-mail addresses of such companies, and the corresponding URLs on the Internet specifying current (i.e. up-to-date) Internet web site locations that provide product-related information customized to such products; and (ii) information representative of commercial service descriptions, the service marks used in connection therewith, the company names providing and/or promoting such services,

the E-mail addresses of such companies, and the corresponding URLs on the Internet specifying current (i.e. up-to-date) Internet web site locations that provide service-related information customized to such services.

Brief Summary Text (21):

Another object of the present invention is to provide a novel method of carrying out electronic-type commercial transactions involving the purchase of products and services which are advertised on the Internet at uniform resource locations that are registered with the IPSI system of the present invention.

Brief Summary Text (22):

Another object of the present invention is to provide a novel system and method of finding in the UPN or USN associated with any particular registered product or service by simply pressing a GUI button on the Internet browser in order to enter a "UPSN Search Mode", whereby (i) a dialogue box is displayed on the display screen requesting any known trademarks associated with the product, or the name of the company that makes, sells or distributes the particular product, and (ii) the corresponding UPN (i.e. UPC) number registered with the IPSP Servers is displayed to the user for acceptance, whereupon the Internet information resource is automatically accessed and displayed on the display screen of the Internet browser.

Brief Summary Text (23):

Another object of the present invention is to provide such a system and method, wherein during the UPSN Search Mode, the UPN (e.g. UPC data structure or numeric string) associated with any registered product can be found within the database of the IPSP Server using any trademark(s) and/or the company name commonly associated with the product, and the USN number associated with any registered service can be found within the database of the IPSP Server using any servicemark(s) and/or the company name commonly associated with the service.

Brief Summary Text (24):

Another object of the present invention is to provide such a system and method, in which Website-based advertising campaigns can be changed, modified or transformed in virtually any way imaginable by simply restructuring the symbolic links between the products and/or services in the campaign with the current Website addresses at which Website advertisements and information sources related thereto are located on the Internet.

Brief Summary Text (25):

Another object of the present invention is to provide a novel system and method of automatically soliciting companies to register their products and services within the databases of such IPSP Servers in order that product and service related information of a multimedia nature (e.g. Websites) registered therewith can be easily found on the Internet by anyone using the system and method of the present invention.

Drawing Description Text (3):

FIG. 1 is a schematic diagram of a first illustrative embodiment of the product and service information finding system of the present invention shown embedded with the infrastructure of the global computer communications network known as the "Internet", and comprising a plurality of data-synchronized Internet Product and Service Directory (IPSP) Servers connected to the infrastructure of the Internet, a plurality of Internet Product and Service Information (IPSI) Servers connected to the infrastructure of the Internet, and a plurality of Client Systems connected to the infrastructure of the Internet;

Drawing Description Text (4):

FIG. 1A is a schematic representation of an exemplary display screen produced by a graphical user interface (GUI) based web browser program running on a Client System

and providing an on-screen IPSI Finder button and an on-screen US/PN Search button for carrying out the IPSI finding method of the present invention;

Drawing Description Text (5):

FIG. 1B is a schematic representation of an exemplary display screen produced by a GUI-based web browser program running on a Client System and providing an on-screen IPSP Website Finder button for instantly connecting to the IPSP Website and carrying out the Internet Product and Service Information finding method of the present invention;

Drawing Description Text (6):

FIG. 2A is a schematic representation of the relational-type IPSI Registrant Database maintained by each IPSP Server that is configured into the IPSI finding system of the illustrative embodiment of the present invention, showing the information fields for storing (i) the information elements representative of the UPN (e.g. UPC numeric data structure, National Drug Code (NDC) numeric data structure, and/or European Product Code (EPC) alpha-numeric data structure), URL, trademark(s) (TM.sub.i), Company Name (CN.sub.i), Product Description (PD.sub.i) and E-mail Address (EMA.sub.i) thereof symbolically-linked (i.e. related) for a number of exemplary IPSI Registrants listed (i.e. registered) with the IPSI Registrant Database maintained by each IPSP Server, and (ii) the information elements representative of the UPN (e.g. UPC numeric data structure, National Drug Code (NDC) numeric data structure, and/or European Product Code (EPC) alphanumeric data structure), URL, Servicemark(s) (SM.sub.i), Company Name (CN.sub.i), Service Description (SD.sub.i) and E-mail Address (EMA.sub.i) thereof symbolically-linked for a number of exemplary IPSI Registrants registered with the IPSI Registrant Database maintained by each IPSP Server;

Drawing Description Text (7):

FIG. 2B is a schematic representation of the relational-type Non-IPSI Registrant Database maintained by each IPSP Server that is configured into the IPSI finding system of the illustrative embodiment of the present invention, showing the information fields for storing (i) the information elements representative of the Company Name (CN.sub.i), Trademark(s) (TM.sub.i) registered by the associated Company, and E-Mail Address (EMA.sub.i) thereof symbolically-linked for a number of exemplary Non-IPSI registrants listed within the Non-IPSI Registrant Database maintained by each IPSP Server, and (ii) the information elements representative of the Company Name (CN.sub.i), Servicemark(s) (SM.sub.i) registered by the associated Company, and E-Mail Address (EMA.sub.i) thereof symbolically-linked for a number of exemplary Non-IPSI registrants listed within the Non-IPSI Registrant Database maintained by each IPSP Server;

Drawing Description Text (8):

FIG. 3A is a schematic diagram illustrating the high level structure of a first type of communication protocol that can be used among the Client System C.sub.a, the IPSP Server S.sub.b, and the IPSI Server S.sub.c of the IPSI finding system hereof when the GUI browser program running on the Client System is in its IPSI Finder Mode of operation, requesting as input a UPSN (i.e. UPN or USN data structure) to determine the URL(s) of the corresponding product (or service) registered therewith;

Drawing Description Text (9):

FIG. 3B is a schematic diagram illustrating the high level structure of a first type of communication protocol that can be used among the Client System C.sub.a, the IPSP Server S.sub.b, and the IPSI Server S.sub.c of the IPSI finding system hereof when the GUI browser program on the Client System is in its UPSN Search Mode of operation, requesting as input a trademark (or servicemark) and/or company name in order to determine the UPSN (i.e. UPN or USN data structure) of the corresponding product (or service) and thus the URL(s) registered therewith;

Drawing Description Text (12):

FIG. 5A is a schematic diagram illustrating the high level structure of a second type of communication protocol that can be used among the Client System C.sub.a, the IPSP Server S.sub.b, and the IPSI Server S.sub.c of the IPSI finding system hereof when the GUI browser program on the Client System is in its IPSI Finder Mode of operation, requiring as input a UPSN to determine the URL(s) of the corresponding product (or service) registered therewith;

Drawing Description Text (13):

FIG. 5B is a schematic diagram illustrating the high level structure of a second type of communication protocol that can be used among the Client System C.sub.a, the IPSP Server S.sub.b, and the IPSI Server S.sub.c of the IPSI finding system hereof when the GUI browser program on the Client System is in its UPSN Search Mode of operation, requiring as input a trademark (or servicemark) and/or company name in order to determine the UPSN of the corresponding product (or service) and thus the URL(s) registered therewith;

Detailed Description Text (3):

The Structure of the Internet Product and Service Information (IPSI) Finding System of the Present Invention

Detailed Description Text (4):

As shown in FIG. 1, the product/service information delivery system of illustrative embodiment of the present invention indicated by reference numeral 1, comprises an arrangement of system components, namely: a globally-based digital telecommunications network (such as the Internet) 2 having an infrastructure (including Internet Service Providers (ISPs), Network Service Providers (NSPs), routers, telecommunication lines, channels, etc.) for supporting packet-switched type digital data telecommunications using the TCP/IP networking protocol well known in the art; one or more Internet Product and Service Directory (IPSP) Servers, each indicated by reference numeral 3 and being connected to the Internet at strategically different locations via the Internet infrastructure and data-synchronized with each other in order that each such Server maintains a mirrored database structure as represented in FIGS. 2A and 2B; a plurality of Internet Product and Service Information (IPSI) Servers, each indicated by reference numeral 4 and being connected to the Internet via the Internet infrastructure; and a plurality of User (or Client) Computers, each indicated by reference numeral 5 and being connected to the Internet via the Internet infrastructure.

Detailed Description Text (5):

In a first illustrative embodiment of the system shown in FIG. 1, each Client Computer 5 has an GUI-based Internet browser program (e.g. Netscape, Internet Explorer, Mosaic, etc.) which has been provided with a suitable plug-in type module constructed in such a way as to provide the functionalities of the present invention herein disclosed. An exemplary display screen produced by the GUI-based web browser program is set forth in FIG. 1A. As shown, the GUI-based web browser program provides an on-screen IPSI Finder Button 8 and an on-screen US/PN Search Button 9 for carrying out the IPSI finding method of the present invention. The details of these functions will be described in detail hereinafter.

Detailed Description Text (6):

In an alternative embodiment of the system shown in FIG. 1, each Client Computer has a conventional GUI-based web browser program (e.g. Netscape, Internet Explorer, Mosaic, etc.) with a plug-in type module, such as CyberFinder.TM. navigational software by Aladdin Systems, Inc., of Watsonville, Calif., that provides an on-screen graphical icon for an "IPSI Website Finder" function. An exemplary display screen 10 produced by such a GUI-based web browser program is set forth in FIG. 1B. As shown, the on-screen IPSI Website Finder icon functions as an "IPSI Website Finder" Button 11 for instantly connecting the Client System to the IPSI Website (i.e. on each IPSP Server) and carrying out the Internet Product and Service

Information (IPSI) finding method of the present invention. Upon pressing this button, the user is automatically connected to IPSI Website (supported on each IPSPD Server), at whose "home page" the IPSI Finder and UP/SN Search buttons described above appear and functionalities represented thereby are provided. The URL for the home page of the IPSI Website could be selected to be, for example, "http://home.ipsi.com", similar in form to other commercial search engines currently available on the Internet. Alternatively, the URL of the IPSI Website can be recorded as a browser "bookmark" for easy recall and access through a conventional GUI-based Internet browser. Once at the home page of the IPSI Website, an Internet user can find product and service related information on the Internet in essentially the same way as when using the web browser program of FIG. 1A.

Detailed Description Text (7):

In the illustrative embodiment, each synchronized IPSPD Server 3 can be realized by, for example, the PowerMac.RTM. Internet Server from Apple Computer, Inc. or any other suitable computing machine that can perform the function of a Server in a web-based, client-server type computer system architecture of the illustrative embodiment. As shown in FIG. 1, each IPSPD Server is interfaced with an ISP 13 in a conventional manner. Each such IPSPD Server is assigned a unique domain name and TCP/IP address on the Internet. Each IPSPD Server is also provided with (i) Internet networking software to support the TCP/IP networking protocol, (ii) an Application Programming Interface (API) for website and application program development and (iii) website server software for creating and maintaining the IPSI Registrant Database and the Non-IPSI Registrant Database schematically illustrated in FIGS. 2A and 2B, respectively. Such databases can be expressed in the Sybase language, the 4th Dimension.RTM. SQL Language, or any other suitable database language which allows for database programming and database connectivity over the Internet. A suitable development program for creating a dynamic website with the integrated database structures of FIGS. 2A and 2B is the "4D Web SmartServer" from ACI, Inc. Data synchronization thereof can be achieved using conventional data synchronization techniques well known in the art. In addition, a backup and mirroring program should be used for complete data security. Preferably, the synchronized IPSPD Servers are maintained by a team of network managers under the supervision of one or more webmasters.

Detailed Description Text (8):

Similarly, each IPSI Server 4 can be realized by, for example, the PowerMac.RTM. Internet Server from Apple Computer, Inc., or any other computing machine that can perform the function of a Server in a web-based, client-server type computer system architecture of the illustrative embodiment. As shown in FIG. 1, each IPSI Server is interfaced with an ISP 13 in a conventional manner. Each such IPSI Server is assigned a unique domain name and TCP/IP address on the Internet. Each IPSI Server is also provided with (i) Internet networking software to support the TCP/IP networking protocol, (ii) an Application Programming Interface (API) for application program development and (iii) website server software for creating and maintaining a hypermedia-type website containing product and/or service related information of a multi-media nature. Such websites can be expressed in HTML and/or VRML or any other suitable language which allows for website construction and website connectivity. Website management software, such as Adobe.RTM. SiteMill.TM., should be used to maintain correct links for any particular web site. Preferably, the IPSI Servers are maintained by a team of network managers under supervision of one or more webmasters.

Detailed Description Text (9):

Each User (i.e. Client) Computer 5 can be realized by any computing system employing operating system (OS) software (e.g. Macintosh, Windows, Unix etc.) which supports an Internet browser program (e.g. Netscape, Internet Explorer, Mosaic, etc.) which includes Internet networking software that supports the TCP/IP networking protocol, and provides a GUI-based Web browser interface. Alternatively, Client Systems may also be realized by (i) a Newton MessagePad 130 (running the

Newton 2.0 Operating System and NetHopper.TM. Internet Software), (ii) a Pippin.TM. computer system from Apple Computer, Inc.; (iii) a network computer (NC) that supports the Java.TM. programming language and Java applets expressed therewith, (iv) a Sony.RTM. WebTV Internet Terminal (supported by the WebTV Service provided by WebTV Network, Inc.), or the like. As shown in FIG. 1, each Client Computer is interfaced with an ISP 13 in a conventional manner. Each such Client System may be assigned a unique domain name and TCP/IP address the Internet, or one may be dynamically assigned thereto by way of its ISP depending on its connectivity. Optionally, each Client System may include website server software for creating and maintaining the hypermedia-type website in a manner well known in the art.

Detailed Description Text (10):

Typically, each Client System 5 will be maintained by potential consumers of products and services which can be found on the Internet. It is understood, however, that Client Systems can be realized in the form of a computer-based kiosk located in supermarkets, department stores, retail outlets, or other public location where products and/or services are being offered for sale. In one embodiment of the computer-based kiosk, a visual display screen, keyboard and pointing device would be provided in the conventional manner to enable consumers to operate its GUI-based browser and thus carry out the method of the present invention. In an alternative embodiment of the kiosk-based Client System, an integrated bar code reader is provided for reading UPC symbols printed on products (as well as UPNs printed on service-related brochures), and a visual display screen is provided for viewing product and service related information automatically displayed thereon in response to the entry of the UPSN information scanned into the system.

Detailed Description Text (11):

The Database Structure of the IPSD Server

Detailed Description Text (12):

As mentioned above, each synchronized IPSD Server 4 maintains two different relational databases, namely: a IPSI Registrant Database; and a Non-IPSI Registrant Database. A schematic representation of the IPSI Registrant Database is shown in FIG. 2A, whereas a schematic representation of the Non-IPSI Registrant Database is shown in FIG. 2B.

Detailed Description Text (13):

As shown in FIG. 2A, the relational-type IPSI Registrant Database maintained by each IPSD Server comprises a plurality of labelled information fields for each product or service "registered" therewith, namely: an IP/SN Information Field for storing information (e.g. numeric or alphanumeric string) representative of the Universal Product or Service Number (e.g. UPC numeric string) assigned to the product or service; a Company Name Information Field for storing information (e.g. numeric or alphanumeric string) representative of the name of the company making, selling or distributing the corresponding product or service; a URL Information Field for storing information (e.g. numeric or alphanumeric string) representative of the Universal Resource Locator (URL) or Universal Resource Locators (URLs) at which information (or the multimedia type) can be found on the Internet relating to the corresponding product or service; a Trademark/Service mark Information Field for storing information (e.g. text and/or alphanumeric strings) representative of each trademark used in connection with the promotion, sale, distribution and/or use of the corresponding product or service, and preferably registered with the United States Patent and Trademark Office (USPTO) or other governmental agency; a Product Description Information Field for storing information (e.g. text strings) descriptive of the corresponding product or service; an E-mail Address Information Field for storing information (e.g. numeric or alphanumeric string) representative of the e-mail address of the corresponding company on the Internet; and a Status Information Field for storing information (e.g. numeric or alphanumeric string) representative of whether the company associated registered product or service has

paid their monthly, quarterly or annual registration fees associated with registration within the IPSP Servers of the information finding system hereof. In general, the URL stored in the URL Information Field specifies the address of an information resource on the Internet (Web), and thus may point to any one of the following types of information resources: a HTML document or file on the World Wide Web (expressed in the HyperText Markup Language); a single record in a database; the front-end of an Internet program such as Gopher; or the results of a query made using another program. In accordance with convention, the syntactic structure of each URL generally comprises: a Protocol Specifier, such as "http", "ftp", "gopher", "news", or "mailto", and specifies the type of resource that the URL is pointing (i.e. connecting) to; a Host Indicator, represented by double slashes "/" if the URL is requesting information from a Web Server; Server Name comprising a Internet Domain Name (e.g. "www."), the address of the Web Server (e.g. "ibm."), and a designator (e.g. "com", "edu", "int", "mil", "net", "org", etc.) identifying who owns the server or where it is located; a Path Name, such as "Products/Computers/", indicating a path to the destination file on the identified Server;

Detailed Description Text (20):

It is understood that, at present, few (if any) services have been currently assigned a UPC numeric string in the manner that nearly all consumer products have been assigned in the contemporary period. However, the present invention contemplates the need for and utility of widespread assignment of UPC (or similar) numeric data structures to particular services (as well as the imprinting of the UPC (or similar) symbol on service brochures and advertisements) in order that (i) such services can be procured on the Internet through an electronic data transaction, and (ii) service-related information can be easily found (i.e. located) and accessed on websites using the system and method of the present invention.

Detailed Description Text (21):

As shown in FIG. 2B, the relational-type Non-IPSI Registrant Database maintained by each IPSP Server comprises a plurality of labelled information fields for each product or service that is not currently registered with the IPSP Server, namely: an IPSN (i.e. IP/SN) information Field for storing information (e.g. numeric or alphanumeric string) representative of the Universal Product or Service Number (e.g. UPC numeric string) assigned to the non-registered product or service; a Company Name Information Field for storing information (e.g. numeric or alphanumeric string) representative of the name of the company making, selling or distributing the corresponding non-registered product or service; a Trademark/Service mark Information Field for storing information (e.g. text and/or alphanumeric strings) representative of each trademark (or servicemark) used in connection the promotion, sale, distribution and/or use of the corresponding product or service, and preferably registered with the USPTO or other governmental agency; a Product Description Information Field for storing information (e.g. text strings) descriptive of the corresponding product or service; and an E-mail Address Information Field for storing information (e.g. numeric or alphanumeric string) representative of the e-mail address of the corresponding company on the Internet; a Status Information Field for storing information (e.g. numeric or alphanumeric string) representative of whether the company associated non-registered product or service has been solicited by the IPSP Server, and on what dates registration solicitation has occurred. Notably, each information item contained within the information field shown along the same horizontal line of FIG. 2A is related or linked. The information required to construct the Non-IPSI Registrant Database shown in FIG. 2B can be readily obtained from a number of commercially or publicly available information sources (e.g., the Universal Code Council, Dayton, Ohio; Infotest International, <http://www.infotest.com//>, etc.)

Detailed Description Text (24):

Referring to FIG. 3A, the high level structure is shown for a first-type of communication protocol that can be used among the Client System C.sub.a, the IPSP

Server S.sub.b, and the IPSI Server S.sub.c of the IPSI finding system hereof when the GUI browser program on the Client System is in its IPSI Finder Mode of operation. FIG. 4A provides a high level flow chart illustrating the steps involved in carrying out this communication protocol when the Client System is in its IPSI Finder Mode of operation.

Detailed Description Text (25):

In order to enter the IPSI Finder mode of the system, the user pushes the "IPSI Finder" button on the GUI-based browser screen. Then at Block A of FIG. 4A, a UPSN is provided as input to IPSD Server S.sub.b, and in response thereto the Client System C.sub.a requests the IPSD Server S.sub.b to provide a registered URL.sub.i if anyone exists in the IPSI Registrant Database.

Detailed Description Text (26):

At Block B in FIG. 4A, the IPSD Server S.sub.b analyses the IPSI Registrant Database shown in FIG. 2A to determine whether or not a symbolically linked URL.sub.i has been registered with a UPSN.sub.i that has been provided as input. If so, then the IPSD Server sends the symbolically linked URL.sub.i to the Client System C.sub.a. If not, then the IPSD records such status registration information in the Non-IPSI Registrant Database shown in FIG. 2B.

Detailed Description Text (27):

At Block C in FIG. 4A, the Client System C.sub.a receives the URL.sub.i from the IPSD Server and then requests the IPSI Server, identified by the URL.sub.i, to provide the product or service information located by the registered URL.sub.i. Having accessed and displayed such product or service related information at the Client System, the user can review the information at the specified URL.sub.i, acquiring knowledge about the product or service, and may, if the option is provided at the URL-specified website, purchase the product or procure (i.e. contract for) the service by way of an on-screen electronic commercial transaction. Such commercial transaction can involve product ordering, delivery specification, and financing through the use of credit or debit card transactions, COD arrangements, or any other financial arrangement acceptable to the vendor of the product or service.

Detailed Description Text (28):

Referring to FIG. 3B, the high level structure is shown for the first-type of communication protocol that can be used among the Client System C.sub.a, the IPSD Server S.sub.b, and the IPSI Server S.sub.c of the IPSI finding system hereof when the GUI browser program on the Client System is in its UPSN Search Mode of operation. FIG. 4B provides a high level flow chart illustrating the steps involved in carrying out this communication protocol when the Client System is in its UPSN Search Mode of operation.

Detailed Description Text (29):

In order to enter the UPSN Search Mode of the system, the user pushes the "UPSN Search" button on the GUI-based browser screen. Then at Block A of FIG. 4B, a trademark TM.sub.i (or servicemark SM.sub.i) and/or a company name CN.sub.i is provided as input to IPSD Server S.sub.b by way of the browser screen, and in response thereto the Client System C.sub.a requests the IPSD Server S.sub.b to provide a registered UPSN.sub.i if any exists in the IPSI Registrant Database, and if so, then also its URL.sub.i to the Client System.

Detailed Description Text (30):

At Block B in FIG. 4A, the IPSD Server S.sub.b analyses the IPSI Registrant Database shown in FIG. 2A to determine whether or not a symbolically linked UPSN.sub.i has been registered with a TM.sub.i (or SM.sub.i) and/or a company name CN.sub.i that has been provided as input to the IPSD Server S.sub.b by way of the browser screen. If so, then the IPSD Server sends to the Client System C.sub.a, the URL.sub.i that is symbolically linked to the registered UPSN.sub.i. If not, then

the IPSD records in the URL-request in the Non-IPSI Registrant Database shown in FIG. 2B for future registration-request operations related to the T/SM.sub.i are sent by the Client System.

Detailed Description Text (31):

At Block C in FIG. 4B, the Client System C.sub.a receives the URL.sub.i from the IPSD Server and then requests the IPSI Server, identified by the URL.sub.i, to provide the product or service information. Having accessed and displayed such product or service related information at the Client System, the user can review the information at the specified URL.sub.i, acquiring knowledge about the product or service, and may, if the option is provided at the URL-specified website, purchase the product or procure (i.e. contract for) the service by way of an on-screen electronic commercial transaction, as described hereinabove.

Detailed Description Text (32):

Referring to FIG. 5A, the high level structure is shown for a second, alternative type of communication protocol that can be used among the Client System C.sub.a, the IPSD Server S.sub.b, and the IPSI Server S.sub.c of the IPSI finding system hereof when the GUI browser program on the Client System is in its IPSI Finder Mode of operation. FIG. 6A provides a high level flow chart illustrating the steps involved in carrying out this communication protocol when the Client System is in its IPSI Finder Mode of operation.

Detailed Description Text (33):

In order to enter the IPSI Finder mode of the system, the user pushes the "IPSI Finder" button on the GUI-based browser screen. Then at Block A of FIG. 5A, a UP/SN is provided as input to IPSD Server S.sub.b, and, in response thereto, the Client System C.sub.a requests the IPSD Server S.sub.b to provide a registered URL.sub.i if one exists in the IPSI Registrant Database.

Detailed Description Text (34):

At Block B in FIG. 4A, the IPSD Server S.sub.b analyses the IPSI Registrant Database shown in FIG. 2A to determine whether or not a symbolically linked URL.sub.i has been registered with UP/SN.sub.i that has been provided as input. If so, then the IPSD Server sends to the IPSI Server S.sub.b hosting the URL, a request for the IPSI Server S.sub.c to send product or service information at the URL.sub.i to the requesting Client System C.sub.a. If the IPSD Server S.sub.b determines that there does not exist a URL.sub.i in the IPSI Registrant Database symbolically linked with the UP/SN.sub.i provided as input to the Client System C.sub.a, then the IPSD Server S.sub.b records the URL-request in the Non-IPSI Registrant Database for future registration operations with the company related to the input UP/SN.sub.i.

Detailed Description Text (35):

At Block C in FIG. 4A, the IPSI Server S.sub.c receives the URL.sub.i sent from the IPSD Server S.sub.b and then provides to the Client System C.sub.a, the product or service information located by the registered URL.sub.i. Having accessed and displayed such product or service related information at the Client System, the user can review the information at the specified URL.sub.i, acquiring knowledge about the product or service, and may, if the option is provided at the URL-specified website, purchase the product or procure (i.e. contract for) the service by way of an on-screen electronic commercial transaction.

Detailed Description Text (36):

Referring to FIG. 5B, the high level structure is shown for the second-type of communication protocol that can be used among the Client System C.sub.a, the IPSD Server S.sub.b, and the IPSI Server S.sub.c of the IPSI finding system hereof when the GUI browser program on the Client System is in its UP/SN Search Mode of operation. FIG. 6B provides a high level flow chart illustrating the steps involved in carrying out this communication protocol when the Client System is in its UP/SN

Search Mode of operation.

Detailed Description Text (37):

In order to enter the UP/SN Search Mode of the system, the user pushes the "UP/SN Search" button on the GUI-based browser screen. Then at Block A of FIG. 5B, a trademark TM.sub.i (or servicemark SM.sub.i) and/or a company name CN.sub.i is provided as input to IPSP Server S.sub.b by way of the browser screen. In response thereto, the Client System C.sub.a requests the IPSP Server S.sub.b to determine whether or not a registered UP/SN.sub.i (and thus symbolically linked URL.sub.i) exists in the IPSI Registrant Database. If so, then the IPSP Server S.sub.b sends the IPSI Server S.sub.c hosting the URL.sub.i, a request for the IPSI Server S.sub.c to send product or service information at the URL.sub.i to the requesting Client System C.sub.a. If the IPSP Server S.sub.b determines that there does not exist a registered UP/SN.sub.i (and thus no symbolically linked URL.sub.i) in the IPSI Registrant Database, then the IPSP Server records the URL request in the Non-IPSI Registrant Database for future registration operations with the company related by the UP/SN.sub.i sent by the Client System C.sub.a.

Detailed Description Text (38):

At Block C in FIG. 6B, the IPSI Server hosting the URL.sub.i receives the request from the IPSP Server S.sub.b and then provides the product or service information identified by the registered URL.sub.i. Having accessed and displayed such product or service related information at the Client System, the user can review the information at the specified URL.sub.i, acquiring knowledge about the product or service, and may, if the option is provided at the URL-specified website, purchase the product or procure (i.e. contract for) the service by way of an on-screen electronic commercial transaction.

Detailed Description Text (41):

The power of the product and service finding tool of the present invention depends in large part of the number of products and services registered with the IPSI system. In principle, numerous techniques may be employed separately and in combination with each other in order to construct the IPSI and Non-IPSI Registrant Databases supported by the IPSP Servers of the present invention.

Detailed Description Text (45):

According to a fourth database construction technique, the IPSI system engages a number of commercial Internet search engines, such as Altavista.TM., Yahoo.TM., WebCrawler.TM., and powerful off-line parallel computing machines that analyze (i.e. mine) information on the World Wide Web in order to collect and link the information elements specified in the IPSI Registrant Database of FIG. 2A.

Detailed Description Text (48):

In each of the above-described embodiments of the system hereof shown in FIGS. 1A and 1B, the Internet browser interface of each Client System is provided with two independent modes of operation, namely: the "ISPI Finder Mode" and the "UPSN Search Mode".

Detailed Description Text (49):

When the "IPSI Finder" button is depressed, the system enters its the IPSI Finder Mode. Preferably, the user is provided with a choice of language (e.g. English, German, French, Japanese, Chinese, etc.) by way of an appropriate menu-selection screen. When the system is in this operational mode, as illustrated in FIGS. 3A, 4A and 5A, 6A, a web-based information resource pertaining to any commercial product or service registered with the system can be automatically accessed from the Internet and displayed from the Internet browser of a Client System. Such information resources can include advertisements, specifications, operation descriptions, product simulations, purchase information, maintenance information, warranty information, electronic data transaction screens, etc. In this mode, desired product or service information is obtained by simply manually entering the

registered product's UPN (e.g. its UPC's 12 digit numerical string) or the registered service's USN (e.g. its UPC's 12 digit numerical string) into the dialogue box of the Internet browser or Internet application tool. Alternatively, a bar code symbol scanner can be used to enter the UP/SN (e.g. UPC or USC numeric string) into the system, thereby avoiding manual keyboard entry operations. The output of the system is the audio and visual display of the website of the registered product or service.

Detailed Description Text (50):

When the "UP/SN Search" button is depressed, the system enters its UP/SN Search Mode". Preferably, the user is provided with a choice of language (e.g. English, German, French, Japanese, Chinese, etc.) by way of an appropriate menu-selection screen. When the system is in this operational mode, as illustrated in FIGS. 3B, 4B and 5B, 6B, a predesignated information resource pertaining to any commercial product or service registered with the system can be automatically accessed from the Internet and displayed from the Internet browser of a Client System. Such information resources can include advertisements, specifications, operation descriptions, product simulations, product upgrade information, purchase information, maintenance information, warranty information, etc. In this mode, desired product or service information is obtained by simply entering the registered product's trademark(s) or servicemark(s) and/or associated company name into the dialogue box of the Internet browser or Internet application tool. The output of the system is the audio and visual display of the website of the registered product or service.

Detailed Description Text (52):

In the illustrative embodiments of the present invention, data-synchronized IPSP Servers are also provided with an "Automated Registration Solicitation Mode" programmed by the webmaster (or administrator) of the IPSI Website. In this mode, each IPSP Server analyzes the data collected within its Non-IPSI Registrant Database. The data analysis procedure seeks to determine: (1) which "unregistered" products or services in the Non-IPSI Registrant Database were the subject of an information request at the IPSP Server; (2) how many hits (requests) were made for the product or service within a predetermined length of time (e.g. one week) by Internet users; and (3) whether the number of requests exceeds a particular "request threshold" (e.g. 100 requests in week period). Then for each unregistered product (or service) which has exceeded the request threshold, the IPSP Server automatically sends an E-mail message to the associated company. Preferably, the E-mail message is designed to (i) inform the company of recent information requests for their products and/or services, and (ii) solicit the registration of such products and/or services with the IPSP Server. Once registered with the system, such products and services can be easily found on the Internet by anyone wishing to use the product and service finding techniques of the present invention.

Detailed Description Text (54):

For example, in the illustrative embodiments described hereinabove, separate databases are maintained by each data-synchronized IPSP Server for (i) registered products and services within the system, and (ii) non-registered products and services within the system. Notably, the reasons for using a dual database design of this sort would be based largely on economics, namely: only those companies who have paid the required maintenance (or registration) fees get their products (or services) and linked URLs "registered" with the system, whereas non-paying companies do not get their products (or services) and linked URLs registered with the system, regardless of how such product-URL or service-URL information is ascertained (e.g. by solicitation versus data mining).

Detailed Description Text (55):

Thus it is contemplated that in some embodiments of the present invention, each IPSP Server will be designed to maintain only a single database for maintaining product-URL and service-URL information currently available on the Internet. In

such embodiments of the present invention, the concept of "non-registered" products and services will be altogether avoided, since the system implementation and administration will (in all likelihood) be designed to not require companies to pay maintenance (or registration) fees in order that their products (or services) and linked URLs are registered with the IPSI system. Instead, some alternative income producing scheme will be used in such embodiments of the present invention (e.g. user fees, subscription fees, Internet browser-licensing fees, etc.) for system maintenance and administration.

Current US Original Classification (1):
705/27

Current US Cross Reference Classification (4):
705/26

CLAIMS:

1. A system of finding information pertaining to a particular product on the Internet, comprising:

a database server connected to the Internet and including

URL/UPN information storage means for storing information representative of (i) a plurality of universal product numbers (UPNs) assigned to a plurality of products, and (ii) a plurality of URLs symbolically linked to said plurality of UPNs, each said URL specifying the location of an information resource located on the Internet related to a particular one of said products, and

request servicing means for servicing a request made by a client system, for information about one of said plurality of products located on the Internet, wherein said request is transmitted to said Internet database server and includes information representative of the UPN assigned to said product; and

a plurality of product-information servers, each connected to the Internet and including

product-related information storage means for storing information related to said plurality of products, and

information delivery means, responsive to said request servicing means, for delivering to said client system, information related to one of said plurality of products specified by the URL symbolically linked to the UPN included in said request made by said client system.

4. The system of claim 1, which further comprises said client system, wherein said client system includes a Internet browser program having an on-screen product finder button which, when depressed, results in a dialogue box requesting that the UPN associated with said request be entered into said client system.

6. A method of finding information pertaining to a particular product on the Internet, comprising the steps of:

(a) storing in a database server connected to the Internet, information representative of (i) a plurality of universal product numbers (UPNs) assigned to a plurality of products, and (ii) a plurality of URLs symbolically linked to said plurality of UPNs, each said URL specifying the location of an information resource located on the Internet related to a particular one of said products;

(b) storing in a plurality of product-information servers, information related to said plurality of products;

(c) transmitting to said database server from a client system, a request for information about one of said plurality of products located on the Internet, wherein said request includes information representative of the UPN assigned to said product; and

(d) at least one said product information server responding to said request transmitted to said database server, and delivering to said client system, information related to one of said plurality of products specified by the URL symbolically linked to the UPN and included in said request made by said client system.

9. The method of claim 6, wherein step (c) comprises:

depressing an on-screen product finder button displayed by an Internet browser program running on said client system, whereupon a dialogue box is displayed requesting that the UPN associated with the requested product be entered; and entering said UPN into said dialogue box.

10. A database server connected to the Internet comprising:

URL/UPN information storage means for storing information representative of (i) a plurality of universal product numbers (UPNs) assigned to a plurality of products, and (ii) a plurality of URLs symbolically linked to said plurality of UPNs, each said URL specifying the location of an information resource located on the Internet related to a particular one of said products, and

request servicing means for servicing a request made by a client system, for information about one of said plurality of products located on the Internet, wherein said request is transmitted to said Internet database server and includes information representative of the UPN assigned to said product.

11. The database server of claim 10, wherein said UPN assigned to each said product is a unique Uniform Product Code (UPC) number assigned to said product.

12. The database server of claim 11, in combination with said client system, wherein each said UPC number is encoded within the structure of a bar code symbol placed on one of said plurality of products, and said client system further comprises a bar code reader for reading said bar code symbol and providing the UPC number encoded therein to said client system.

13. The database server of claim 10, wherein said product related information is of a multi-media nature.

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L7: Entry 4 of 6

File: USPT

Jun 29, 1999

US-PAT-NO: 5918214

DOCUMENT-IDENTIFIER: US 5918214 A

TITLE: System and method for finding product and service related information on the internet

DATE-ISSUED: June 29, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Perkowski, Thomas J.	Darien	CT		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
IPF, Inc.	Darien	CT			02

APPL-NO: 08/ 736798 [\[PALM\]](#)

DATE FILED: October 25, 1996

INT-CL: [06] G06 F 17/60, G06 F 17/00

US-CL-ISSUED: 705/27; 705/26, 235/375, 395/200.49, 379/93.12

US-CL-CURRENT: 705/27; 235/375, 370/352, 379/93.12, 705/26, 709/219

FIELD-OF-SEARCH: 705/1, 705/16, 705/17, 705/21, 705/26, 705/27, 235/375, 235/376, 235/385, 235/454, 235/462, 395/200.31, 395/200.33, 395/200.47, 395/200.49, 379/93.12

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

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	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>4654482</u>	March 1987	DeAngelis	379/93.12
<input type="checkbox"/>	<u>5640193</u>	June 1997	Wellner	348/7

ART-UNIT: 271

PRIMARY-EXAMINER: Tkacs; Stephen R.

ATTY-AGENT-FIRM: Perkowski; Thomas J.

ABSTRACT:

A novel system and method for finding product and service related information on the Internet. The system includes Internet Servers which store information pertaining to Universal Product or Service Number (e.g. UPC number) preassigned to each product and service registered in the system, with Uniform Resource Locators (URLs) that point to the location of one or more information resources on the Internet, e.g. World Wide Websites, related to such products or services. Each client computer system includes an Internet browser or Internet application tool which is provided with a "Internet Product/Service Information (IPSI) Finder" button and a "Universal Product/Service Number (UPSN) Search" button. The system enters its "IPSI Finder Mode" when the "IPSI Finder" button is depressed and enters the "UPSN Search Mode" when the "UPSN Search" button is depressed. When the system is in its IPSI Finder Mode, a predesignated information resource (e.g. advertisement, product information, etc.) pertaining to any commercial product or service registered with the system is automatically accessed from the Internet and displayed from the Internet browser by simply entering the registered product's UPN or the registered service's USN into the Internet browser. When the system is in its "UPSN Search Mode", a predesignated information resource pertaining to any commercial product or service registered with the system is automatically accessed from the Internet and displayed from the Internet browser by simply entering the registered product's trademark(s) or (servicemark) and/or associated company name into the Internet browser.

13 Claims, 13 Drawing figures

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L7: Entry 1 of 6

File: USPT

May 16, 2000

US-PAT-NO: 6064979

DOCUMENT-IDENTIFIER: US 6064979 A

TITLE: Method of and system for finding and serving consumer product related information over the internet using manufacturer identification numbers

DATE-ISSUED: May 16, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Perkowski; Thomas J.	Darien	CT		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
IPF, Inc.	Darien	CT			02

APPL-NO: 08/ 752136 [\[PALM\]](#)

DATE FILED: November 19, 1996

PARENT-CASE:

RELATED CASES This is a Continuation-in-Part of application Ser. No. 08/736,798 entitled "System And Method For Finding Product And Service Related Information On The Internet" filed by Thomas J. Perkowski on Oct. 25, 1996, now U.S. Pat. No. 5,918,214, and incorporated herein by reference in its entirety.

INT-CL: [07] [G06 F 17/60](#)

US-CL-ISSUED: 705/26; 235/375, 378/93.12, 709/219, 705/27

US-CL-CURRENT: [705/26](#); [235/375](#), [705/27](#), [709/219](#)

FIELD-OF-SEARCH: 705/1, 705/14, 705/16, 705/21, 705/22, 705/24, 705/26, 705/27, 707/1, 707/2, 707/3, 707/4, 707/10, 707/101, 707/104, 707/501, 707/513, 395/200.3, 395/200.31, 395/200.33, 395/200.47, 395/200.48, 395/200.49, 235/375, 235/376, 235/462, 329/93.12, 709/219

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

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	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	4654482	March 1987	DeAngelis	379/93.12
<input type="checkbox"/>	5288976	February 1994	Citron et al.	235/375

<input type="checkbox"/> <u>5592378</u>	January 1997	Cameron et al.	705/27
<input type="checkbox"/> <u>5612527</u>	March 1997	Ovadia	235/383
<input type="checkbox"/> <u>5635694</u>	June 1997	Tuhro	235/375
<input type="checkbox"/> <u>5640193</u>	June 1997	Wellner	348/7
<input type="checkbox"/> <u>5715444</u>	February 1998	Danish et al.	707/4
<input type="checkbox"/> <u>5804803</u>	September 1998	Cragun et al.	235/375

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FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0 744 856 A2	November 1996	EP	
0 837 406 A2	April 1998	EP	
WO 97/01137	January 1997	WO	
WO 97/38389	October 1997	WO	
WO 97/37319	October 1997	WO	
WO 98/06055	February 1998	WO	
WO 98/09243	March 1998	WO	
WO 98/20411	May 1998	WO	

ART-UNIT: 271

PRIMARY-EXAMINER: Tkacs; Stephens R.

ATTY-AGENT-FIRM: Perkowski, Esq., P.C.; Thomas J.

ABSTRACT:

A method of and system for finding and serving consumer product-related information on the Internet comprising a database serving subsystem which stores: a plurality of manufacturer identification numbers (MINs) assigned to a plurality of manufacturers of consumer products; a plurality of home-page specifying URLs symbolically linked to the plurality of MINs; a plurality of universal product numbers (UPN) assigned to a plurality of consumer products made by the plurality of manufacturers; and a plurality of product-information specifying URLs symbolically linked to the plurality of UPNs. During operation, a client subsystem transmits to the database serving subsystem, a request for information which includes the UPN assigned to the consumer product on which product-related information is being sought. The database serving subsystem automatically compares the UPN against the stored plurality of MINs, and automatically returns to the client subsystem, one or more of URLs symbolically linked to the UPN, if URLs have been symbolically linked to the UPN within the database serving subsystem. However, if no URLs have been symbolically linked to the UPN, then the database serving subsystem automatically returns the home-page specifying URL symbolically linked to the MIN contained within the UPN in the request. By virtue of this novel MIN-based search mechanism embodied within the database serving subsystem, client subsystems are automatically provided with the home-page of the manufacturer's World Wide Web (WWW) site in situations where product-information specifying URLs have not yet been symbolically linked with the UPN on any one of the manufacturer's products.

27 Claims, 14 Drawing figures

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L7: Entry 2 of 6

File: USPT

Feb 22, 2000

US-PAT-NO: 6029141

DOCUMENT-IDENTIFIER: US 6029141 A

TITLE: Internet-based customer referral system

DATE-ISSUED: February 22, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bezos; Jeffrey P.	Seattle	WA		
Kaphan; Sheldon J.	Seattle	WA		
Ratajak; Ellen L.	Seattle	WA		
Schonhoff; Thomas K.	Seattle	WA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Amazon.com, Inc.	Seattle	WA			02

APPL-NO: 08/ 883770 [\[PALM\]](#)

DATE FILED: June 27, 1997

INT-CL: [07] [G06 F 17/60](#)

US-CL-ISSUED: 705/27; 705/26, 705/10

US-CL-CURRENT: [705/27](#); [705/10](#), [705/26](#)

FIELD-OF-SEARCH: 705/27, 705/10, 705/14, 705/26, 707/513, 395/200.3, 395/200.33, 395/200.53, 395/200.54, 395/200.57

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

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PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/> 5319542	June 1994	King, Jr. et al.	705/27
<input type="checkbox"/> 5537314	July 1996	Kanter	
<input type="checkbox"/> 5590197	December 1996	Chen et al.	
<input type="checkbox"/> 5712979	January 1998	Graber et al.	395/200.54
<input type="checkbox"/> 5715314	February 1998	Payne et al.	380/24
5717860	February 1998	Graber et al.	395/200.57

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<input type="checkbox"/>	<u>5724424</u>	March 1998	Gifford	380/24
<input type="checkbox"/>	<u>5745681</u>	April 1998	Levine et al.	395/200.3
<input type="checkbox"/>	<u>5812769</u>	September 1998	Graber et al.	395/200.58
<input type="checkbox"/>	<u>5819285</u>	October 1998	Damico et al.	707/104

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Dialog file 16 (database PROMT(R)), No. 6016914, "BookSite launches version 3.0 of the popular electronic commerce web site.", Business Wire, 2 pages, Feb. 23, 1996.

Dialog file 16 (database PROMT(R)), No. 6296727, "Amazon.com introduces "Amazon.com Associates"--a new model for internet-based commerce." Business Wire, 3 pages, Jul. 18, 1996.

Can Mixing `Cookies` with Online Marketing be a Receipe for Heartburn? (Infoworld, vol. 18, No. 30), Jul. 22, 1996.

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Online Growth Virtually Untapped; PC Vendors Taking More Advantage of Booming Sales (Computer Retail Week vol. 4, No. 64, p. 160), Jun. 6, 1994.

Selected document from Books.com Web site describing Book Stacks Unlimited links partner program, downloaded and printed Jun. 20, 1997 and Jun. 23, 1997.

Selected documents from Incognito Cafe Web site describing several on-line bookstore links, undated (5 printed pages).

Resnick, P., Iacovou, N., Suchak, M., Bergstrom, P., and Riedl, J., GroupLens: An Open Architecture for Collaborative Filtering of Netnews. Proceedings of ACM 1994 Conference on Computer Supported Cooperative Work, Chapel Hill, NC, pp. 175-186.

Balabanovic, M., and Shoham, Y., Fab: Content-Based, Collaborative Recommendation. Communications of the ACM, vol. 40., No. 3, (Mar. 1997) pp. 66-73.

ART-UNIT: 271

PRIMARY-EXAMINER: Voeltz; Emanuel Todd

ASSISTANT-EXAMINER: Kalinowski; Alexander

ATTY-AGENT-FIRM: Knobbe, Martens Olson & Bear, LLP

ABSTRACT:

Disclosed is an Internet-based referral system that enables individuals and other business entities ("associates") to market products, in return for a commission, that are sold from a merchant's Web site. The system includes automated registration software that runs on the merchant's Web site to allow entities to register as associates. Following registration, the associate sets up a Web site (or other information dissemination system) to distribute hypertextual catalog documents that includes marketing information (product reviews, recommendations, etc.) about selected products of the merchant. In association with each such product, the catalog document includes a hypertextual "referral link" that allows a user ("customer") to link to the merchant's site and purchase the product. When a customer selects a referral link, the customer's computer transmits unique IDs of the selected product and of the associate to the merchant's site, allowing the merchant to identify the product and the referring associate. If the customer subsequently purchases the product from the merchant's site, a commission is automatically credited to an account of the referring associate. The merchant site also implements an electronic shopping cart that allows the customer to select products from multiple different Web sites, and then perform a single "check out"

from the merchant's site.

42 Claims, 14 Drawing figures

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L7: Entry 2 of 6

File: USPT

Feb 22, 2000

DOCUMENT-IDENTIFIER: US 6029141 A

TITLE: Internet-based customer referral systemAbstract Text (1):

Disclosed is an Internet-based referral system that enables individuals and other business entities ("associates") to market products, in return for a commission, that are sold from a merchant's Web site. The system includes automated registration software that runs on the merchant's Web site to allow entities to register as associates. Following registration, the associate sets up a Web site (or other information dissemination system) to distribute hypertextual catalog documents that includes marketing information (product reviews, recommendations, etc.) about selected products of the merchant. In association with each such product, the catalog document includes a hypertextual "referral link" that allows a user ("customer") to link to the merchant's site and purchase the product. When a customer selects a referral link, the customer's computer transmits unique IDs of the selected product and of the associate to the merchant's site, allowing the merchant to identify the product and the referring associate. If the customer subsequently purchases the product from the merchant's site, a commission is automatically credited to an account of the referring associate. The merchant site also implements an electronic shopping cart that allows the customer to select products from multiple different Web sites, and then perform a single "check out" from the merchant's site.

Application Filing Date (1):

19970627

Brief Summary Text (2):

This invention relates to electronic commerce. Specifically, this invention relates to information processing methods for marketing and selling goods via the Internet or other interactive network.

Brief Summary Text (6):

With the increasing popularity of the Internet and the World Wide Web, it has become common for merchants to set up Web sites for marketing and selling goods. One example of such a Web site is the online bookstore site of AMAZON.COM, the assignee of the present invention. Via this site, consumers can access and place orders from an online book catalog that includes millions of titles.

Brief Summary Text (7):

One problem commonly encountered by online merchants is an inability to effectively market goods via their Web sites. Because the customer cannot physically inspect the products via the Web site, and typically cannot talk to a salesperson, it is desirable that the site provide access to product reviews, product ratings, and other information that can be relied on by the customer to make an informed decision. In many cases, however, the merchant lacks the resources needed to generate or otherwise obtain such information, especially if the merchant sells a large and diverse selection of goods. For example, it would not be practical for AMAZON.COM to prepare reviews of all, or even a significant portion of, the millions of titles available on the AMAZON.COM site.

Brief Summary Text (8):

Another problem commonly faced by online merchants is an inability to efficiently attract potential consumers to their Web sites. One way of attracting consumers has been to market the site through television, newspaper and Internet advertisements. However, advertising a site using conventional methods can be expensive, and can consume significant human resources. In addition, it is often difficult or impossible to evaluate the effectiveness of a given advertisement.

Brief Summary Text (11):

The present invention provides a software system and method for enabling an Internet sales entity, referred to herein as the "merchant," to efficiently market and sell goods in cooperation with Web sites or other network sites of respective business partners, referred to herein as "associates." The system and method are implemented in part by software that runs on the merchant's Web site. Through this site, an entity can enroll (via an automated registration process) as an associate, and can then disseminate catalogs (Web documents, PUSH documents, e-mail newsletters, etc.) that include the associate's reviews and/or recommendations on specific products sold by the merchant.

Brief Summary Text (12):

In accordance with one aspect of the invention, the associate catalog documents include product-specific hyperlinks, referred to herein as "referral links," that allow potential customers to link to the merchant's Web site to initiate purchases of such products from the merchant. Each referral link is provided within the catalog document in association with referral information that is transmitted to the merchant's site when a user (customer) clicks on the referral link. This referral information preferably includes the unique ID of the associate (assigned upon enrollment) and the unique ID of the selected product. Referral processing software running on the merchant site uses this information to identify the associate that referred the customer to the merchant site, and to identify the product selected from the associate's catalog. If the customer subsequently purchases the selected product from the merchant site (e.g., by filling out an order form page and submitting the order), the referral processing software automatically credits the referring associate for the referral by, for example, applying a commission to an account of the associate. In one implementation, the referral commission is automatically generated based on a fixed percentage of the merchant's selling price, and is paid to the associate electronically on a periodic basis (such as every calendar quarter).

Brief Summary Text (13):

In accordance with another aspect of the invention, the merchant site implements an automated associate enrollment process for allowing individuals and business entities to register as associates. The enrollment process is implemented in part by Web pages that are transmitted to the computer of the associate applicant, and by enrollment software that runs on the merchant site. During the enrollment process, the applicant is presented with an online business agreement (in the form of a Web page) that sets forth the terms and conditions of doing business with the merchant. In addition, the applicant is presented with an online form that requests various information, such as the name, payment address and e-mail address of the applicant and a description of the proposed associate Web site. In one implementation, the enrollment software includes text scanning code that automatically scans the completed form for pre-specified words and phrases (vulgarity, etc.) that may give rise to a rejection of the application, and flags the application for further (human) review when such a word or phrase is found.

Brief Summary Text (14):

As part of the online registration, the application is processed (either automatically or by a staff member of the merchant), and the enrollment software generates and assigns a unique associate ID to the applicant, and stores this ID (together with other associate information) in an associate database of the

merchant site. In addition, the enrollment software generates and sends an e-mail message to the associate with instructions for placing referral links within catalog documents.

Brief Summary Text (15):

In a preferred embodiment, the merchant site includes code that maintains a unified shopping cart data structure ("shopping cart") for each ongoing customer shopping session. For each ongoing shopping session, the shopping cart maintains a record of at least: (i) the products that are currently selected by the customer for prospective purchase, and (ii) the referral source (if any) of each such product. In one implementation, each shopping cart persists on the merchant site for an extended period of time (such as one week) following the most recent access by the customer, thereby allowing the customer to conduct extended shopping sessions. To purchase the products represented within the shopping cart, the customer proceeds to a "check out" area of the merchant site and submits an order. Software running on the merchant site then uses the information collected within the shopping cart to identify, and appropriately credit the account of, each associate that provided a corresponding referral.

Brief Summary Text (17):

In one implementation, the various components are provided on the Web site of AMAZON.COM as part of the AMAZON.COM Associates Program. Through this program, an individual or business entity can register as an AMAZON.COM associate, and can then set up a Web site to market customized subsets of the books (typically in a particular area of expertise) available from the AMAZON.COM site. For example, a computer company can set up a site (or add an area to an existing site) to recommend and sell selected books on computer programming languages, and a Cajun chef can set up a site to recommend and sell selected books on New Orleans style cooking. The associate is in turn paid a commission or other consideration based on the referrals that result in actual purchases. Because AMAZON.COM handles the various tasks associated with processing orders from customers (including shipping, collections, and customer service), the associate need only be concerned with the administration of the associate Web site.

Brief Summary Text (18):

An important benefit of the invention is that it allows the task of marketing the merchant's products to be efficiently distributed among entities that have established reputations and exposure within their respective fields. Another benefit is that it provides an efficient mechanism for exposing the merchant's Web site to the public, by encouraging others (associates) to set up outgoing links to the merchant's site.

Brief Summary Text (19):

Because the associate enrollment and referral tracking/credit functions are automated in whole or in part, these benefits can be realized with minimal supervision by the merchant. In addition, because the compensation provided to the associates is performance-based (e.g., based on the number of referrals that result in actual sales), the merchant need not be concerned with the existence of large numbers of associates that provide relatively small numbers of referrals.

Drawing Description Text (6):

FIG. 4 illustrates a URL format used to embed referral links within Web documents in accordance with the invention.

Drawing Description Text (8):

FIG. 6 is a screen display illustrating an HTML catalog document of the associate's Web site.

Drawing Description Text (9):

FIG. 7 is an HTML listing illustrating a preferred method for embedding a referral

link within a catalog document of an associate's Web site.

Drawing Description Text (10):

FIG. 8 is a screen display illustrating an HTML catalog document detail page of the merchant Web site.

Drawing Description Text (12):

FIGS. 10a-10c are screen displays illustrating HTML documents of the merchant Web site.

Detailed Description Text (12):

Client-Server. A model of interaction in a distributed system in which a program at one site sends a request to a program at another site and waits for a response. The requesting program is called the "client," and the program which responds to the request is called the "server." In the context of the World Wide Web (discussed below), the client is a "Web browser" (or simply "browser") which runs on a computer of a user; the program which responds to browser requests by serving Web pages is commonly referred to as a "Web server."

Detailed Description Text (14):

Hypertext System. A computer-based informational system in which documents (and possibly other types of data entities) are linked together via hyperlinks to form a user-navigable "web."

Detailed Description Text (15):

Internet. A collection of interconnected (public and/or private) networks that are linked together by a set of standard protocols (such as TCP/IP and HTTP) to form a global, distributed network. (While this term is intended to refer to what is now commonly known as the Internet, it is also intended to encompass variations which may be made in the future, including changes and additions to existing standard protocols.)

Detailed Description Text (16):

World Wide Web ("Web"). Used herein to refer generally to both (i) a distributed collection of interlinked, user-viewable hypertext documents (commonly referred to as Web documents or Web pages) that are accessible via the Internet, and (ii) the client and server software components which provide user access to such documents using standardized Internet protocols. Currently, the primary standard protocol for allowing applications to locate and acquire Web documents is HTTP, and the Web pages are encoded using HTML. However, the terms "Web" and "World Wide Web" are intended to encompass future markup languages and transport protocols which may be used in place of (or in addition to) HTML and HTTP.

Detailed Description Text (17):

Web Site. A computer system that serves informational content over a network using the standard protocols of the World Wide Web. Typically, a Web site corresponds to a particular Internet domain name, such as "amazon.com," and includes the content associated with a particular organization. As used herein, the term is generally intended to encompass both (i) the hardware/software server components that serve the informational content over the network, and (ii) the "back end" hardware/software components, including any non-standard or specialized components, that interact with the server components to perform services for Web site users.

Detailed Description Text (18):

HTML (HyperText Markup Language). A standard coding convention and set of codes for attaching presentation and linking attributes to informational content within documents. (HTML 2.0 is currently the primary standard used for generating Web documents.) During a document authoring stage, the HTML codes (referred to as "tags") are embedded within the informational content of the document. When the Web document (or HTML document) is subsequently transferred from a Web server to a

browser, the codes are interpreted by the browser and used to parse and display the document. Additionally in specifying how the Web browser is to display the document, HTML tags can be used to create links to other Web documents (commonly referred to as "hyperlinks"). For more information on HTML, see Ian S. Graham, The HTML Source Book, John Wiley and Sons, Inc., 1995 (ISBN 0471-11894-4).

Detailed Description Text (19):

HTTP (HyperText Transport Protocol). The standard World Wide Web client-server protocol used for the exchange of information (such as HTML documents, and client requests for such documents) between a browser and a Web server. HTTP includes a number of different types of messages which can be sent from the client to the server to request different types of server actions. For example, a "GET" message, which has the format GET <URL>, causes the server to return the document or file located at the specified URL.

Detailed Description Text (21):

URL (Uniform Resource Locator). A unique address which fully specifies the location of a file or other resource on the Internet. The general format of a URL is protocol://machine address:port/path/filename. The port specification is optional, and if none is entered by the user, the browser defaults to the standard port for whatever service is specified as the protocol. For example, if HTTP is specified as the protocol, the browser will use the HTTP default port of 80.

Detailed Description Text (22):

Cookies. A technology that enables a Web server to retrieve information from a user's computer that reveals prior browsing activities of the user. The informational item stored on the user's computer (typically on the hard drive) is commonly referred to as a "cookie." Many standard Web browsers support the use of cookies.

Detailed Description Text (23):

PUSH Technology. An information dissemination technology used to send data to users over a network. In contrast to the World Wide Web (a "pull" technology), in which the client browser must request a Web page before it is sent, PUSH protocols send the informational content to the user computer automatically, typically based on information pre-specified by the user.

Detailed Description Text (25):

FIG. 1 illustrates the general architecture of a referral system that operates in accordance with the present invention. The system includes a customer computer 108, an associate Web site 100, and a merchant Web site 106, all of which are linked together by the Internet 104. The customer computer 108 may be any type of computing device that allows a user ("customer") to interactively browse Web sites via a Web browser 112. For example, the customer computer 108 may be a personal computer (PC) that runs the Windows NT operating system.

Detailed Description Text (26):

The merchant Web site 106 is a site that provides various functionality for allowing customers to purchase products, including products selected from the Web sites of associates. Typically, this site will be operated by a business entity (referred to herein as the "merchant") that handles the various order processing, shipping, collections, and customer service tasks associated with the sale of goods. In an implementation described herein, the merchant Web site 106 is the site of AMAZON.COM.

Detailed Description Text (27):

As described below, the site 106 includes enrollment software that implements an online registration process for allowing other entities (individuals, companies, etc.) to register as associates. An entity enrolling as an associate provides the merchant Web site 106 with a completed, online registration application that is

processed by an enrollment software program ("SW") at the site 106. The enrollment software creates an entry in the associate database 160 according to the information provided by the enrolling associate.

Detailed Description Text (28):

The associate's Web site 100 is the site of an entity that has registered with the merchant, via the online registration process, to market a subset of the merchant's goods in return for compensation (preferably a performance-based commission). Typically, this site is owned and operated by an individual or business entity ("associate") that is not in the same business as that of the merchant. For example, in the context of the AMAZON.COM Associates Program, the associate may be an individual that is in the business of rating mystery novels.

Detailed Description Text (29):

As described below, because the merchant handles the tasks of processing online orders, shipping products, collecting payment, and providing customer service, the associate need not be concerned with these tasks. Thus, the associate can effectively become an online retailer immediately, by simply enrolling as an associate and setting up a Web site.

Detailed Description Text (30):

In addition, because the merchant Web site 106 includes software for automating the primary functions of doing business with associates (such as associate enrollment, referral transaction processing, and commission tracking and payment), the architecture allows the merchant to do business with large numbers (e.g., thousands) of associates with minimal supervision by the merchant. Further, because the commissions paid to the associates are performance-based, there is little or no downside to the merchant to enrolling marginally-productive associates that provide relatively small numbers of referrals.

Detailed Description Text (31):

In operation, the customer accesses the associate's Web site 100 using a standard Web browser 112, such as Microsoft's Internet Explorer or Netscape's Navigator, which uses the HTTP protocol to communicate with a Web server 116 of the associate's site 100. The Web server 116 accesses a local store of catalog documents 120 (in the form of HTML or "Web" documents) which can be requested, retrieved and viewed by the customer via the Web browser 112. These catalog documents 120 include information generated by the associate about the various products featured on the associate's Web site 100. Preferably, this information includes editorial descriptions, reviews, and/or recommendations of the products that assist customers in making informed purchasing decisions.

Detailed Description Text (32):

The catalog documents 120 served by the associate's site 100 include special hyperlinks (to Web pages of the merchant Web site 106) for allowing consumers to select products for prospective purchase. Typically, one such hyperlink is provided for each product displayed on the associate's Web site 100. Alternatively, a hyperlink may be provided for a group of products. When a customer selects (e.g., clicks on) the hyperlink associated with a particular product, the customer is automatically connected to the merchant Web site 106, and presented with various options (included within Web pages 136 served from the merchant Web site 106) for allowing the customer to purchase the selected product from the merchant. The hyperlink thus serves as a referral mechanism for referring the customer to the merchant Web site 106.

Detailed Description Text (33):

As described in detail below, the special hyperlinks (also referred to herein as "referral links") of the associate's catalog documents are provided in association with additional information (embedded in a pre-defined format within the associated URL) that is transmitted to the merchant Web site 106 in response to selection of

the link. In one implementation, this information includes a unique identifier of the associate (assigned upon enrollment) and a unique identifier of the selected product (such as the ISBN of a book). A computer program 144 of the merchant Web site 106 uses this information to identify the associate that was the source of the referral, and to credit the sale (referral) to the associate if the customer subsequently purchases the product (or group of products). (In other implementations, the crediting of the associate may occur without regard to whether the product is purchased.) Commission payments can then be paid to the associates on a periodic basis (such as once a month). In one implementation, the commission payments are made electronically, via the computer program 144, without the need for involvement by the merchant.

Detailed Description Text (34):

In one implementation, the merchant Web site 106 comprises a product information database (not shown) that stores product pricing information. The computer program 144 of the merchant site 106 uses this pricing information to calculate the proper commission or referral payment.

Detailed Description Text (35):

Although the implementation described herein uses monetary commissions to compensate the associates for referrals, other forms of compensation can be used. For example, an associate (and/or the associate's customers) could be given a discount on products or services sold by the merchant.

Detailed Description Text (36):

In one implementation of the merchant Web site 106, selection of a referral link causes a product detail page 136 to be displayed on the customer computer 108. This detail page 136 is served by the merchant Web site 106, and includes various information provided by the merchant (price, inventory, standard product description, etc.) about the selected product. From this page, a hyperlink can be selected that allows the selected product to be added to a customer "shopping cart."

Detailed Description Text (37):

The shopping cart is a customer-specific data structure that is generated and maintained (within a shopping cart database 152) by executable code of the merchant site 106. The database may be any type of data repository including, for example, an SQL table or ASCII text file. The information stored within the shopping cart includes a list of the products that have been selected by the customer for prospective purchase, together with an identifier of the referring associate (if any) corresponding to each such product. In one implementation, each shopping cart persists on the site 106 for an extended period of time (such as one week) following the most recent access by the customer, allowing the customer to conduct extended shopping sessions. When the customer proceeds to a check-out area of the merchant site 106 and submits an order for the selected products, the associate identifiers stored within the customer's shopping cart are used to appropriately credit the accounts of the referring associates. Although the shopping cart implementation provides an efficient mechanism for tracking and crediting referral events, referrals can alternatively be credited without the use of a shopping cart, such as by crediting the associate at the time of, or during the same shopping session as, the referral.

Detailed Description Text (38):

Because the identity of the customer is normally unknown to the merchant Web site 106 at the time of the referral event, the site 106 uses cookies technology to identify the customer, so that the customer can be associated with any existing shopping cart created during previous visits to the site 106. This process involves retrieving the cookie 140 from the customer computer 108 with the Web server 132, and then executing a computer program 144 that compares the cookie against information stored in a customer data structure 148. If no shopping cart exists for

the customer, or if no cookie exists on the customer computer 108, a shopping cart structure is created for the user. Any of a variety of alternative techniques can be used to identify the customer, including prompting the customer for a user ID, and/or using URL information returned by the customer's Web browser.

Detailed Description Text (39):

Although the embodiment described herein uses Web technology to disseminate the catalog documents, any of a variety of document types and electronic dissemination technologies can be used. For example, the associate's catalog documents may be in the form of hypertextual e-mail messages that are disseminated by a list server, or PUSH documents disseminated by a PUSH server. As interactive television, video-on-demand, and Web TV technologies continue to evolve, it is contemplated that the "catalog documents" will include video advertisements that are displayed to the customer on a television screen. Further, although hypertextual catalog documents are preferably used, it is possible for an associate to use non-hypertextual catalogs (including paper-based product catalogs) that simply instruct the customer to manually enter the appropriate URL (including the referral information) into a browser program.

Detailed Description Text (40):

In addition, although the system is described in the context of "the" associate's Web site, it should be recognized that a given associate can disseminate its catalog documents (using the single associate ID assigned during online registration) from multiple different sites, including sites that use different document formats and transfer protocols. Further, although the system is described herein in the context of a merchant that sells products, it will be recognized that the architecture can also be used to sell services, including online services that are provided over the Internet.

Detailed Description Text (41):

As will be appreciated by those skilled in the art, the use of the URL-embedded referral information to identify the associate allows the associate to be identified, and properly credited for the referral, with a high degree of reliability. For example, in contrast to conventional user tracking techniques, the present method allows the associate to be reliably identified even if the associate Web site 100 operates behind a firewall. In addition, the method provides a high degree of flexibility to the associate. For example, the associate can change to a different Internet service provider, and can use or switch between multiple catalog dissemination techniques (Web, e-mail, PUSH, etc.), without affecting the ability of the merchant Web site 106 to identify and credit the associate. Moreover, the associate can freely modify its product offerings--without the need for involvement by the merchant--by simply updating product descriptions and corresponding referral links within the catalog.

Detailed Description Text (42):

A significant benefit of the architecture is that it allows the task of marketing the merchant's products to be efficiently distributed among entities that have established reputations and exposure within their respective fields. In the context of the AMAZON.COM Internet bookstore, for example, a well-established computer company can set up an associate site (or an area of an existing site) to recommend its favorite books on programming languages; and an Italian chef can set up a site to recommend his favorite cookbooks on Italian cooking. In implementations that involve sales of other types of products (such as audio/video equipment), the associates may, for example, include testing laboratories that publish test results.

Detailed Description Text (43):

Because the associate enrollment and referral tracking functions are automated (in whole or in part), the referral services provided by the associates take place with little or no human supervision or intervention by the merchant. In addition,

because the payments to the associates are performance-based (e.g., based on the number of sales resulting from associate referrals), the merchant need not be concerned with the effectiveness of any given associate site.

Detailed Description Text (44):

The system and method also provide an efficient mechanism for exposing the merchant and the merchant Web site 106 to the public by encouraging others (associates) to set up outgoing links to the merchant's Web site. For example, this may be beneficial where the merchant Web site 106 is configured to support direct sales (i.e., sales that do not involve referrals from associates), as is this case with the site of AMAZON.COM.

Detailed Description Text (47):

As indicated above, the merchant Web site 106 includes automated enrollment software (FIG. 1) for allowing an entity to apply, via the Internet, to operate as an associate. The registration process may include the following: (i) the presentation of an online business agreement to the applicants, (ii) the use of an automated "agent" to scan the application text for key inputted terms, including vulgarities and other terms that may serve as a basis for denying the application, (iii) the automated generation and assignment of a unique associate ID (also referred to herein as the "store ID") to an applicant, and (iv) the automated electronic transmission of referral link embedding instructions to the applicant.

Detailed Description Text (48):

FIG. 2 illustrates the general flow of information between components when an associate applicant uses a computer 200 to enroll as an associate. The computer 200 includes a conventional Web browser 204 which communicates with the merchant Web server 132 using the HTTP protocol. The Web server 132 accesses a local store 136 of HTML documents (Web pages) which can be requested, retrieved and viewed by the applicant via the Web browser 204. These documents may, for example, include information about registering online to become an associate. Access to the merchant Web site 106 and the enrollment function is available to any client computer 200, and the enrolling associate is not required to have an established Web site at the time of enrollment.

Detailed Description Text (49):

As further illustrated in FIG. 2, the enrolling associate begins the enrollment function by selecting the proper hyperlink from the merchant Web page 136 containing online registration instructions. The merchant Web server 132 accesses a local store of HTML documents 136 and returns an online registration application document 208 (also shown in FIGS. 3a-3c) to the enrolling associate's Web browser 204. The enrolling associate can then fill out the detailed online application form 208.

Detailed Description Text (50):

Referring to FIGS. 3a-3c, a preferred embodiment of the online application form 208 is shown. The application requests information about the enrolling associate, including the Web server to be used for the associate's Web site, the associate Web site's descriptive name, and the e-mail address of the enrolling associate. Many alternative formats to the online application form are possible and FIGS. 3a-3c are only representative of the types of information that may be requested.

Detailed Description Text (51):

With further reference to FIG. 2, once the electronic application form 204 is completed by the enrolling associate, it is sent from the associate's computer 200 to the merchant Web server 132 for further processing. As will be appreciated by those skilled in the art, other forms of enrollment processing may be used, including but not limited to regular mail and electronic mail. In addition, although the automated enrollment function is preferably handled by the same computer system that handles the referral processing function, these functions

could be performed by dedicated, physically distinct computer systems or sites.

Detailed Description Text (52):

In response to submission of the enrollment form, the merchant Web server 132 initiates a computer program 144 comprising enrollment software that processes the information contained on the electronic application form 208. In one implementation, an agent is used to scan the application text for pre-specified terms, and to flag the application for further review (such as by a staff member) if such a term exists. If no such term is found, and the application is complete, the enrollment software automatically accepts the application.

Detailed Description Text (53):

As part of this online registration, once the application has been processed (either automatically or with human intervention), the enrollment software generates a unique store ID to be assigned to the associate. In addition, the enrollment software creates a database entry corresponding to the enrolling associate and stores the store ID and the information provided by the enrolling associate as a unique entry in an associate database 160. The database may be any type of data repository including, for example, an SQL table or ASCII text file. This database entry allows the merchant Web site 106 to properly track and credit associate referrals, as further described below.

Detailed Description Text (54):

Next, the computer program 144 automatically formats and transmits an electronic mail message to the e-mail address of the approved associate. This electronic mail message provides detailed information about setting up an associate's Web site, including instructions on how to create HTML documents with referral links. These instructions specify a predefined format for embedding the store ID and unique product IDs with the HTML link structures. In addition, the e-mail message includes the unique store ID (generated by the enrollment software), and includes instructions on obtaining unique product IDs. The associate can obtain the unique product IDs by browsing the merchant Web site 106. Alternatively, the unique product IDs may be obtained by the associate through a specific electronic mail request, or may be provided by the merchant Web site when the initial electronic mail response is sent. A preferred set of linking instructions that are sent to new associates is included as Appendix A.

Detailed Description Text (55):

FIG. 4 illustrates a preferred format of a URL 400 used by an associate to create a referral link to the merchant Web site. This format is recognized by parsing software (FIG. 1) that runs on the merchant Web site. The URL 400 comprises the merchant Web server information 402, the unique product ID 404, the unique store ID 406, and an associate commission scheme ID 408. The unique store ID 406 represents the information created and stored in the associate's database during the associate enrollment process described above. In the AMAZON.COM implementation, the unique product ID 404 is the ISBN of a book that is available from the AMAZON.COM Web site. The associate commission scheme ID is an optional feature that can be used to specify a commission percentage or method for calculating the referral commission.

Detailed Description Text (56):

Upon receipt of the special linking instructions, the associate can begin to build the content (catalog documents) of the associate's Web site, including the descriptions of the products to be featured on the site. An associate can begin to refer customers to the merchant Web site 106 at anytime; however, no credit may be given to the associate for referred customers until the associate has included properly-formatted referral links within its product catalog. Additionally, referral credit may be withheld if the merchant has not yet authenticated and qualified the associate Web site for business.

Detailed Description Text (58):

A preferred method for processing referral events will now be described with reference to FIGS. 5-7. Referring to FIG. 5, which depicts an example sequence of events, a customer accesses an associate's Web site 100 via the customer computer 108. The customer computer 108 includes a conventional Web browser 112 which communicates with the associate's Web server 116 using the HTTP protocol. As depicted by events A and B, the Web server 116 accesses a local store of catalog documents 120 (Web pages) which can be requested, retrieved and viewed by the customer via the Web browser 112. As described above, these catalog documents 120 include information about the various products featured at the associate's Web site 100. Preferably, this information includes editorial descriptions, reviews, and recommendations generated by the associate.

Detailed Description Text (59):

FIG. 6 illustrates an example HTML catalog document (Web page) 120 in accordance with the present invention. The customer views the product catalog document 120 via the Web browser 112 in order to select a particular product (book) offered through the associate's Web site 100. In this example, the catalog document 120 comprises a graphic icon 600 that is a scaled-down replica of an actual book cover. The graphic icon 600 also functions as a hyperlink, allowing the customer to click on the icon with a mouse in order to link to the merchant Web site 106. The document 120 includes the title 602 and author of the book 604, and includes an editorial description and recommendation of the book 606 from the associate. The catalog document 120 also contains another textual hyperlink 608, allowing the customer to link to the merchant Web site 106 and initiate referral transaction processing. Typically, the associate's product catalog (which may include multiple catalog pages) contains several referral links (with different product IDs), each corresponding to a different product sold by the merchant.

Detailed Description Text (60):

FIG. 7 is an HTML source code listing which illustrates a preferred format for including a referral link within an HTML catalog document. The source code of FIG. 7 corresponds to the product catalog document 120 illustrated in FIG. 6. In this example, the referral link (included between the HTML anchor tags "A" and "/A") consists of the URL <http://www.amazon.com/exec/obidos/ISBN=0809232022/skinetA/> and the corresponding textual description "Click here to order Terrain Skiing!." The URL is identified as such by the standard HREF (hypertext reference) tag. The portion of the URL preceding "skinetA" uniquely identifies a product detail page (of the AMAZON.COM site) of a book having an ISBN of 0809232022. As described below, the "skinetA" portion of the URL identifies both the referring associate and a commission scheme. The referral link is included within the document such that selection by the customer of the text "Click here to order Terrain Skiing!" causes the Web browser 112 to transmit the URL on the Internet 104 via a standard HTTP message.

Detailed Description Text (61):

Further referring to FIG. 5, upon clicking or otherwise selecting the referral link 608 of the associate's catalog document 120 (event C), the Web browser 112 communicates with the merchant Web server 132 (events D-F) to access HTML documents 136 of the merchant Web site 106. Initially, the customer is shown a product detail page that provides detailed information about the selected product, and allows the customer to add the selected product to the shopping cart (described below). The Web server 132 also serves Web pages (including dynamically-generated pages) that display and allow the customer to edit the contents of the shopping cart, and that allow the customer to proceed to a check-out area to order the selected products.

Detailed Description Text (62):

Once the customer has linked to the merchant Web site 106, the customer can use the navigational controls of the Web browser 112 to return to the associate's Web site 100. In addition, the detail page and/or the shopping cart page may be provided with a hyperlink to allow the customer to return to the associate's Web site 100.

Another alternative is for the associate Web site 100 to be created using an HTML frame format. The bottom frame can be designated as the target area frame for the merchant's Web site 106. The top frame can provide navigational controls for the customer to return to the associate's Web site 100 after selection of a particular product at the merchant's Web site 106. This allows the customer to maintain an associate's Web page frame while viewing and processing product purchases at the merchant's Web site 106.

Detailed Description Text (63):

Following the referral event, the customer can browse the merchant Web site 106 for additional products, and can add these products to the shopping cart. In one configuration option, the referring associate is given commission credit for all additional products thereafter selected (during the current browsing session) from the merchant Web site 106, assuming the customer subsequently purchases these products. In another configuration option, the associate is only credited for the purchase of the product that was the subject of the referral.

Detailed Description Text (64):

The sequence of events that takes place when the customer clicks on the referral link 608 will now be described in greater detail. Before the product detail page 136 is sent to the customer's Web browser 112, the merchant Web server 132 initiates a computer program 144 to conduct several processing steps. As depicted by event E1 in FIG. 5, the computer program 144 executes parsing software (FIG. 1) to parse the URL passed to the merchant Web server 132. The parsing software extracts the unique product ID (ISBN), the unique store ID associated with a particular associate, and an optional associate commission ID from the URL data string. For example, if the URL string is

Detailed Description Text (66):

the parsing software parses the string to extract the unique product ID (ISBN) of 0809232022, the unique store ID of "mystore," and the commission ID of "A." In one implementation, the software 144 uses the commission ID to calculate an appropriate commission (e.g. 10% of merchant's sales price) to apply to the associate's account. As described below, if the customer subsequently adds the selected product to the shopping cart, the extracted information is recorded within a shopping cart data structure that corresponds to the customer.

Detailed Description Text (68):

As discussed above, the present invention provides a system for maintaining a unified shopping cart that stores product information associated with product referrals from multiple Web sites, and keeps track of the sources (associates) of such referrals. One benefit of this feature is that it enables the customer to perform a single "check out" to purchase products from multiple Web sites. Additionally, this feature allows the merchant Web site 106 to accurately track and credit each associate, on a per-product-sale basis, that has referred a customer. For example, if, upon "check-out" from the merchant Web site 106, the customer has three books listed in the shopping cart, each of which resulted from a referral from a different associate Web site, each associate will be credited for its respective referral. While the shopping cart feature is particularly useful in the context of the disclosed referral system, the feature can also be applied to other types of Internet shopping systems that support shopping from multiple Web sites, including systems that use remote "agents" to monitor Web sites based on pre-specified selections of the customer.

Detailed Description Text (69):

The data structures and processing steps that implement the shopping cart will now be described with further reference to FIG. 5. As indicated above, the shopping cart maintains a customer-specific record of the products that have been selected by the customer, including the identities of any associate Web sites that acted as referral sources with respect to such products. Preferably, the computer program

144 maintains this information in a data structure that is stored on the Web site 106 for an extended period of time (such as one week) since the last access to the shopping cart by the user. This allows the customer to discontinue and later resume a shopping session without loss of the shopping cart data.

Detailed Description Text (70):

Upon customer selection of a referral link, the computer program 144 utilizes the customer cookie information 140 passed through an HTTP call to determine whether the particular customer (or technically, the customer computer 108) already has an open shopping cart (event E2). As part of this process, the computer program 144 executes cookie processing software (FIG. 1), which assigns a unique customer ID to the customer based on the cookie information 140. If the customer's Web browser 112 does not support the use of cookies (or if the cookies feature is disabled) the program 144 uses URL information received from the Web browser to generate the customer ID.

Detailed Description Text (71):

The customer ID is in turn used by the software 144 to identify any shopping cart currently associated with the customer. If no shopping cart exists for the customer, a new shopping cart structure (which includes the customer ID) is generated within the shopping cart database 152. The customer ID is also stored in a customer database 148. The algorithm used by the program 144 to generate the customer IDs is such that a cookie retrieved from the same customer computer will consistently produce the same customer ID. Thus, assuming the customer always uses the same computer to access the merchant site 106, and that the browser 112 supports the use of cookies, the customer will be assigned the same customer ID, and will be associated with any existing shopping cart.

Detailed Description Text (72):

In one implementation, once the customer has been referred to the merchant site 106 and the customer ID has been determined, the merchant site dynamically includes this ID within hyperlinks of the detail page and other Web pages that are sent to the customer computer 108. When the customer subsequently selects such a link (such as to add a selected product to the shopping cart), the customer ID is automatically transmitted to the merchant site 106 as part of the HTTP message. This allows the merchant site 106 to identify the customer (and shopping cart) without the need to re-request the cookie from the customer computer.

Detailed Description Text (73):

During the process of displaying detail pages and allowing the customer to add products to the shopping cart, neither the merchant site 106 nor the associate sites have access to the customer's personal information (name, address, credit card number, etc.). Thus, the system advantageously allows the customer to shop anonymously. Only when an order is actually submitted does the merchant site 106 obtain access to the customer's information, and at no time is the information provided to the associate sites.

Detailed Description Text (74):

With further reference to FIG. 5, the shopping cart is stored as a table or data structure within the shopping cart database 152, along with individual product selections made by customers. If the customer has an existing shopping cart, the computer program 144 will create another product selection entry within the shopping cart database 152, as indicated generally by event E3. If the customer does not have an existing shopping cart, then the computer program will create a new shopping cart data structure within the shopping cart database 152. The product selection entry within the shopping cart database 152 includes the store ID and product ID. If a product is selected directly from the merchant Web site 106, the corresponding store ID field may be blank or encoded with merchant-specific information. Other information may be stored in the shopping cart to implement the specific business procedures of the particular merchant.

Detailed Description Text (75):

When the customer subsequently purchases a product or products contained in the shopping cart, the associate's unique store ID maintained in the associate data structure 160 is used to appropriately credit the associate's account. During this process (or at the time of the referral) the computer program 144 determines whether the store ID represents a valid (enrolled) associate in the associates database 160. The processing at the merchant Web site 106 maintaining the associate's store ID in the shopping cart allows the system to obtain pricing information for a product and associate. In this way, the computer program 144 can be configured to generate special discounts or pricing incentives to the customer or associate depending on a particular business relationship.

Detailed Description Text (76):

The shopping cart stored in the shopping cart database 152 is maintained by the computer program 144 running at the merchant Web site 106 that monitors the open entries (non-closed shopping carts) in the shopping cart database 152. The shopping cart database 152 includes the customer ID, the date the shopping cart was opened (open date), and the date last accessed (touch date). The shopping cart database is monitored by the computer program 144 to purge all shopping carts that have been inactive (untouched) for a pre-defined period of time, such as one week.

Detailed Description Text (77):

FIG. 8 illustrates an example of an HTML catalog document (Web page) 136 corresponding to the product detail page. After processing a referral URL, the merchant Web server 132 sends the detail page 136 to the customer's Web browser 112 to provide the customer with additional information about the selected product. The product detail page includes the merchant's information (price, standard description, etc.) about the selected product. The product detail page 136 is shown with the URL passed to the customer Web browser 112 from the merchant Web server.

Detailed Description Text (78):

The URL (shown at the top of FIG. 8) comprises the unique customer ID 800 (obtained from the customer's cookie or URL information), the product ID 802 (shown as the ISBN of the Terrain Skiing book), the store ID 804 (shown as the "skinet" Web site), and the associate commission ID 806 (the letter "A"). Once the customer has reviewed the product detail page 136, the customer can select the "Add it to your Shopping Cart" hyperlink 808. When the customer clicks on this hyperlink 808, the merchant Web server 132 returns a dynamically-generated HTML document that displays the contents of the shopping cart.

Detailed Description Text (79):

FIG. 9 illustrates an example HTML document 136 (Web page) corresponding to the customer shopping cart. The customer shopping cart document 136 displays information about the products currently selected by the customer for prospective purchase. In this example, the selection item 902 is displayed to the customer as the "Terrain Skiing" book previously selected. From this page 136, the customer may leave the shopping cart page, without proceeding to check-out, by either selecting the "continue shopping" link 904 or by using a Web browser navigational control to proceed to a different Web page.

Detailed Description Text (80):

FIG. 10a represents another associate's Web site where the customer can view products featured with editorial comments. For purposes of this example, it may be assumed that the customer proceeded directly to this site (e.g., by selecting a "favorite places" URL) from the shopping cart page of FIG. 9. If the customer selects the hyperlink 1000, the merchant Web server returns the product detail page for the "Cooking with Daniel Boulud" book, as illustrated in FIG. 10b. The customer may then add this book to the shopping cart by selecting the "Add it to your Shopping Cart" hyperlink 1002, and the customer will then be brought to the

shopping cart Web page illustrated in FIG. 10c. The shopping cart now has product selection items corresponding to the two books selected by the customer during the shopping session, and each of these product selection items is stored in the shopping cart database to uniquely identify the respective associate that made the referral. When the customer selects the "Proceed to Checkout" hyperlink 1004 on the shopping cart Web page, the merchant Web site returns a form document (not shown) that allows the customer to specify payment information, shipping information, and other information needed to process the order.

Detailed Description Text (81):

As illustrated by the above example, one customer shopping cart can have line items (corresponding to book selections) from many different associate Web sites. In addition, the shopping cart can include line items of books that have been selected directly from the merchant. As described above, because the shopping cart keeps track of each referral, the referring associates can efficiently be credited for their respective referrals upon order submission, without the need for the customer to perform multiple "check-outs."

Detailed Description Text (82):

The merchant Web site includes credit generation software for calculating associate referral credit. Referral credit may be calculated in any of a number of ways depending on the associate and merchant business relationship, and may be provided to the associate on a periodic basis, such as at the end of each calendar quarter. For example, the associate may be paid a fixed percentage of the list selling price. As indicated above, commission payments may be made automatically using an appropriate electronic payment method.

Detailed Description Text (83):

As will be appreciated from the foregoing, the shopping cart feature of the system enables the customer to view the entire shopping experience as a seamless, automated shopping session. The seamless nature of the session allows the customer to shop for products based on the marketing expertise of the associates, while conveniently utilizing the merchant's order fulfillment resources.

Detailed Description Text (85):

The merchant Web site also preferably includes report generation software (FIG. 1) that automatically generates and transmits associate feedback reports to respective associates, based on information stored by the merchant Web site. The software can be configured to generate the reports on a daily, weekly, monthly and/or annual basis. The information contained within these reports enables the associates to evaluate the effectiveness of their Web sites on a per-product basis.

Detailed Description Paragraph Table (1):

APPENDIX A _____ Date: Tue, 24 Jun 1997 02:11:28 - 0700 (PDT) To: mystore@aol.com Subject: Amazon.com Books: Thank you for your application Cc: associates@amazon.com Thanks for submitting your application to participate in the Amazon.com Associates Program. Your application has been temporarily approved. We'll contact you by e-mail once we have reviewed and approved your application. *Important*: Be sure to save this email message--you will need some of the information here to properly set up your links to Amazon.com. You can set up your Web site now. You have been assigned a unique Associates ID. You'll use this ID when linking your sponsoring Web site into our catalog; detailed instructions are included at the end of this message. Your unique Associates ID is: mystore. USING THE AMAZON.COM BRAND NAME As you may already know, Amazon.com has received a great deal of very positive press coverage since we opened. From The Wall Street Journal, Newsweek and the Associated Press to PC Magazine and WebWeek, mainstream and industry press alike have helped to make the Amazon.com brand name one of the more well-known among Internet sites. Our extensive advertising campaign reaches users of many major Web services and search tools, and our printed ads are found in places like the New York Times Review of Books. You should consider using

not only our name but one of the logos or banners found on our site at:
<http://www.amazon.com/exec/obidos/subst/assoc-art.html> so that your visitors have the chance to recognize our name as a familiar and trustworthy Internet retailer working in association with you. SUGGESTIONS FOR SUCCESSFUL PRESENTATION: We've put a page on our Web site filled with suggestions for building a great online bookstore. These tips are taken from our most successful Associates, and we highly recommend reading them. Follow the link on our home page to "Build Your Own Bookstore", and from there link to "Build a Great Bookstore". You can also connect directly at this URL: <http://www.amazon.com/exec/obidos/subst/assoc-success-tips.html> HOW TO LINK INTO OUR CATALOG: You can use any sort of book descriptions, review material and graphics that you like when describing books on your Web site. All we need is a separate link into our catalog for each book you wish to recommend. You may add or remove these links at any time without our prior approval; as long as they follow the prescribed format we'll detect them automatically when they are used. Each link to our catalog will be the same except for the ISBN of the book. You'll see the "isbn=" part of the link at the end of each example below. To find the ISBN of the book you wish to list, use our Web site and search for that book with any of our search tools. The ISBN for each edition (hardcover, paperback, book on tape) is displayed on the detail page for that book. Remember--you may change which books you list whenever you like. You won't need our permission and it's not even necessary to advise us of the changes--they'll be automatically detected and commissioned properly. EXAMPLE: For each book you recommend, link it to us like this:

<http://www.amazon.com/exec/obidos/ISBN=1234567890/mystoreA/> Note: You *must* use a capital A at the end of this link, not a lower-case a. Of course, the ISBN will change for each book. Do not include any spaces or dashes in the ISBN when making these links. Also, make sure to check our catalog first--we can only sell what's listed there. VERY IMPORTANT: If you copy the URL of a book page from our Web site and modify it to fit the format above, be sure to remove the 19-character shopping cart ID that appears at the end of the bookmarked or copied URL. Your store code should immediately follow the ISBN as in the example above. If you leave this in your modified links, they will not work properly. The information we have about your Web site is as follows: Contact e-mail Address: mystore@aol.com Contact address: John Doe 1234 East Road Anytown WA 12345 Payee e-mail address: mystore@aol.com Payee address: Doe Enterprises, Inc. 1234 East Road Anytown WA 12345 Description of books you intend to list: Business Books - How to Business Books Sponsoring Web site name: Sponsoring Web site URL: Your Web site name, in the format we may use on our website: Mystore - Anytown, WA in association with Amazon.com Books If you have any questions, you can e-mail us at associates@amazon.com and we'll be happy to help. Once again, thanks for your application. Sincerely, Associates staff Amazon.com Books <http://www.amazon.com/> 2.5 million titles, consistently low prices

Detailed Description Paragraph Table (2):

APPENDIX B

Amazon.com Associates Program

Weekly Activity Reports Every week, we e-mail our Associates a detailed activity report so that they can track the effectiveness of their efforts. A sample of the report shows what you can expect to receive weekly: Sample Weekly Activity Report Last Week's Sales Results Note: This report includes a column labeled "ORDERED," which is the weekly number of copies for which orders have been placed through your special links. Only after these orders are paid for and shipped will they actually count toward your referral fee. Some of these orders may later be canceled, customers' credit cards may be declined, and occasional returns should be expected; in any of these cases, the referral fee will not be earned. The column labeled "HITS" represents the number of times one of your visitors clicked on a book (this column can help you gauge your visitors' interest in the books you are selling). The column labeled "REFERRAL FEE" represent the referral fees your site has earned on orders. Please remember that we pay you based on orders *shipped*, so your actual Referral Fee may be somewhat lower than the fee stated here. Look for special notices in the titles listed below. They can help you track books that may

not pay referral fees and identify certain problems with the link format you may be using **1** indicates that this item is currently being featured at a discount of more than 30%. **2** indicates that this item is "special order" or carries no discount Other notes may indicate problems with a link format or items no longer carried in our catalog. Quarter-to-Date Books Ordered: 105 Quarter-to-Date Qualified Book Revenue: 4266.46 Quarter-to-Date Referral Fees: 519.04 Click-throughs and sales by individual book for the week of 12-Jan-97 through 18-Jan-97 Store ID mystore ISBN HITS ORDERED YOUR FEE TITLE 0534517072 4 2 1.70 **2** Earth Online: An Internet Guide 2 sold at 0% off list price of 16.95 0672309599 3 0 0.00 Microsoft SQL Server 6.5 Db Survival G 0764530038 2 0 0.00 Danny Goodman's JavaScript Handbook 0789704927 355 11 65.99 Building Delphi 2 Database Applications 11 sold at 20% off list price of 49.99 0789704943 2 0 0.00 Using VRML 0789707500 1 0 0.00 Delphi 2 Tutor: The Interactive Seminar 1568302894 110 6 8.10 **1** Creating Killer Web Sites: The A sold at 40% off the list price of 45.00 Totals: 477 19 75.79 Number of Visitors on 19-Jan-97 68 Number of Visitors on 20-Jan-97 65 Number of Visitors on 21-Jan-97 54 Number of Visitors on 22-Jan-97 59 Number of Visitors on 23-Jan-97 50 Number of Visitors on 24-Jan-97 47 Number of Visitors on 25-Jan-97 32 Total Visitors this week 375

NOTE: A "Visitor" is a person who click on book links from your site, and is counted as 1 visitor (above) regardless of the number of different titles they click on. We keep track of this by watching their shopping cart ID, which remains the same for every book they click on. A "Hit" is any person clicking on a book link, and each click is counted as 1 hit. If the same visitor click on 5 different titles, we record 1 visitor and 5 hits. Therefore, you should expect the number of visitors to be lower than the total number of hits.

Current US Original Classification (1):
705/27

Current US Cross Reference Classification (2):
705/26

Other Reference Publication (1):
Dialog file 16 (database PROMT(R)), No. 6016914, "BookSite launches version 3.0 of the popular electronic commerce web site.", Business Wire, 2 pages, Feb. 23, 1996.

Other Reference Publication (2):
Dialog file 16 (database PROMT(R)), No. 6296727, "Amazon.com introduces "Amazon.com Associates"--a new model for internet-based commerce." Business Wire, 3 pages, Jul. 18, 1996.

Other Reference Publication (3):
Can Mixing `Cookies` with Online Marketing be a Recipe for Heartburn? (Infoworld, vol. 18, No. 30), Jul. 22, 1996.

Other Reference Publication (4):
Real Time Travel Info Available Online (Dialog database file 9, document 01107096), Jan. 17, 1995.

Other Reference Publication (5):
Online Growth Virtually Untapped; PC Vendors Taking More Advantage of Booming Sales (Computer Retail Week vol. 4, No. 64, p. 160), Jun. 6, 1994.

Other Reference Publication (6):
Selected document from Books.com Web site describing Book Stacks Unlimited links partner program, downloaded and printed Jun. 20, 1997 and Jun. 23, 1997.

Other Reference Publication (7):
Selected documents from Incognito Cafe Web site describing several on-line bookstore links, undated (5 printed pages).

CLAIMS:

1. A method of selling items with the assistance of associates, the method comprising:

providing a Web site system that includes a browsable catalog of items and provides services for allowing customers to electronically purchase the items;

providing an associate enrollment system which allows users to electronically apply to operate as associates that select and recommend items from the catalog and refer customers to the Web site system in exchange for compensation;

in response to a submission to the enrollment system by a user, assigning an associate identifier to the user and recording the associate identifier within a computer memory;

electronically providing to the user instructions for generating hypertextual documents with item-specific links that, when selected by a customer, cause the user's associate identifier and an identifier of a recommended item to be transmitted to the Web site system in a request message;

receiving a request message which contains an associate identifier and an item identifier and extracting the associate and item identifiers from the message, the request message generated by a computer of a customer in response to selection by the customer of an item-specific link provided by an associate in conjunction with a recommendation of the item;

transmitting to the customer's computer a Web page which corresponds to the item identifier extracted from the request message;

transacting a sale of the item and/or other items of the catalog with the customer through the Web site system;

using the associate identifier extracted from the request message to identify the associate; and

determining and recording within a computer memory compensation for the associate for the sale.

7. A method of selling items with the assistance of associates, the method comprising:

providing a Web site system that includes a browsable catalog of items and provides services for allowing customers to electronically purchase the items;

providing a database which contains information about a plurality of associates that select and recommend items from the catalog within respective areas of expertise, at least some of the associates operating associate Web sites that include item-specific links to the Web site system;

receiving from a computer of a customer a request message which contains an associate identifier and an item identifier and extracting the associate and item identifiers from the message, the request message generated in response to selection by the customer of a link of an associate Web site, the link provided in conjunction with a recommendation of the item by an associate;

transmitting to the customer's computer a Web page which corresponds to the item identifier extracted from the request message;

transacting a sale of the item and/or other items of the catalog with the customer through the Web site system;

using the associate identifier extracted from the request message and the database to identify the associate; and

compensating the associate for the sale.

10. A method of selling items with the assistance of associates, the method comprising:

providing a Web site system that includes a browsable catalog of items and provides services for allowing customers to electronically purchase the items;

transmitting to a user a business agreement which specifies legal terms for operating as an associate that refers customers to the Web site system in exchange for compensation;

transmitting to the user an associate enrollment application which is adapted to be completed and electronically submitted to apply to operate as an associate;

electronically receiving a completed enrollment application from the user;

processing the completed enrollment application;

storing user information contained within the completed enrollment application and an associate identifier within a computer memory;

electronically providing to the user instructions for generating hypertextual documents with item-specific links that, when selected by a customer, cause the user's associate identifier and an identifier of a recommended item to be transmitted to the Web site system in a request message; and

in response to a referral of a customer which results in a purchase of one or more items from the Web site system, determining compensation for the user for the referral.

14. A method of facilitating electronic purchases of items, comprising:

providing a Web site system that includes a browsable catalog of items and provides services for allowing customers to electronically purchase items from the catalog;

providing a system for allowing associates to operate associate Web sites that display selected items of the catalog and refer customers to the Web site system in exchange for compensation;

tracking a customer's selections of a plurality of items of the catalog from multiple different associate Web sites, wherein different items of the plurality are selected by the customer from different associate Web sites;

maintaining a record of the plurality of items selected by the customer within a shopping cart data structure within a computer memory of the Web site system;

with the Web site system, transacting a sale of the plurality of items recorded within the shopping cart data structure to the customer; and

in response to the sale, determining, for each of the associate Web sites from which the items were selected, compensation for a corresponding associate.

15. The method of claim 14, wherein maintaining a record of the plurality of items

comprises storing within the shopping cart data structure identifiers that correspond to the associate Web sites from which the respective items were selected.

16. The method of claim 14, further comprising the computer-implemented steps of:
generating a report that contains information about customer referrals produced by an associate Web; and
transmitting the report to a corresponding associate.

17. A method of selling items from a catalog of items with the assistance of associates, the catalog accessible to users of a merchant Web site system which provides services for allowing users to electronically purchase items from the catalog, the method comprising:

enrolling a plurality of associates using an online registration system;

initiating electronic transfers to the associates of instructions for creating Web pages with links that are formatted to enable referrals of customers from Web sites of the associates to the merchant Web site to be tracked;

tracking referrals of customers from the Web sites of the associates to the merchant Web site system; and

determining compensation for the associates for the referrals of customers that result in purchases of items from the catalog.

19. The method of claim 17, wherein enrolling a plurality of associates comprises providing electronic access to a document which contains terms and conditions for operating an associate Web site.

22. The method of claim 17, further comprising transmitting to at least one associate of the plurality a document which contains suggestions for building a successful online store.

23. A method of operating a virtual store to sell items in association with a merchant that operates a merchant Web site, the method comprising:

providing an associate Web site which is separate from the merchant Web site;

selecting from an electronic catalog of the merchant Web site a subset of items of the catalog to display within the associate Web site, the subset including at least one item;

for each item of the subset, incorporating into the associate Web site (a) a description and/or graphical representation of the item, and (b) a link which permits a user of the associate Web site to access the merchant Web site to purchase the item, the link formatted such that selection of the link by the user causes a computer of the user to generate a request message which includes an item identifier and an associate identifier; and

receiving compensation for at least one referral of a user to the merchant Web site that results in a sale, the referral resulting from selection of the link.

24. The method of claim 23, further comprising generating an editorial description of at least one of the items of the subset, and incorporating the editorial description into the associate Web site.

25. The method of claim 23, wherein selecting from the electronic catalog comprises

selecting a plurality of books which fall within a subject-based category to which the associate Web site pertains.

26. The method of claim 23, further comprising displaying a business name and/or logo of the merchant within the associate Web site to indicate an affiliation with the merchant.

27. The method of claim 23, further comprising incorporating into the associate Web site a link which corresponds to a group of products of the electronic catalog.

28. The method of claim 23, further comprising receiving an electronic report which contains data about customer referrals and resulting purchases produced by the associate Web site.

29. A method of assisting in sales of items from a catalog of items of a merchant Web site system, the method comprising:

completing and electronically submitting an online application to apply to operate as a referral source that refers customers to the merchant Web site system in exchange for compensation for referrals that produce sales;

electronically receiving instructions for creating Web pages with links that are formatted to permit the tracking of customer referrals to the merchant Web site system;

providing a Web site which is separate from the merchant Web site system;

incorporating into the Web site at least one Web page according to the instructions, the Web page including a link that is formatted to permit tracking of customer referrals to the merchant Web site system; and

receiving compensation for at least one customer referral to the merchant Web site system that results in a sale of one or more items from the catalog, the customer referral resulting from selection by a customer of the link.

33. The method of claim 29, further comprising displaying within the Web site a business name and/or logo corresponding to the merchant Web site system.

34. The method of claim 29, further comprising selecting at least one item from the catalog, and incorporating a description and/or graphical representation of the item into the Web site.

35. The method of claim 29, further comprising receiving an electronic report which contains data about customer referrals and resulting sales produced by the Web site.

36. A computer-implemented system which implements a program in which associates of a merchant electronically refer customers to a Web site of the merchant, the system comprising:

an associate registration system which implements an electronic application process to at least partially automate enrollment of associates, the associate registration system providing associates electronic access to instructions for forming Web pages with links that are formatted to permit tracking of customer referrals to the Web site;

a referral processing system which tracks referrals of customers to the Web site from associates using associate identifiers contained within request messages, the request messages generated by customer computers in response to selection of links provided by the associates according to the instructions; and

a compensation system which determines and maintains records of compensation for the respective associates for the customer referrals that result in purchases of items from a catalog of the Web site.

42. The system of claim 41, wherein the report generation system includes an online menu for allowing associates to specify parameters for generating custom feedback reports.

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